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## SECTOR 9 — CHART INFORMATION

## SECTOR 9

### THE ANDAMAN ISLANDS AND THE NICOBAR ISLANDS

**Plan.**—This sector describes Preparis Island, the Coco Islands, the Andaman Islands, and the Nicobar Islands. The descriptive sequence is from N to S, and from W to E.

#### General Remarks

**9.1** A chain of islands, divided into four groups by well-defined channels, stretches in a vast ellipse between **Pagoda Point** (15°57'N., 94°15'E.) and the N end of Sumatera, about 630 miles to the S. The principal channels leading through the groups consist of Preparis North Channel, between Preparis Island and Alguada Reef; Preparis South Channel, between Preparis Island and the furthest N of the Coco Islands; Coco Channel, between the S island of the Andaman Islands; and Ten Degree Channel, between the furthest S of the Andaman Islands and the furthest N of the Nicobar Islands.

Vessels bound from Calcutta or Madras to Rangoon usually pass through Preparis North Channel.

The track from Calcutta to Singapore leads through Preparis South Channel, well N of Table Island. Vessels often use this channel during the Southwest Monsoon in order to pass E of and to the leeward of the Andaman Islands. Vessels should keep well N of Table Island because of the irregularity of the soundings in the vicinity of that island and the strong tidal currents. Vessels passing E of Table Island should keep in depths of more than 91.1m.

Vessels passing through Coco Channel should pass at least 5 miles S of Little Coco Island and at least 4 miles N of Landfall Island.

During the Northeast Monsoon, the banks off the W side of the Andaman Islands may be passed over by vessels of light draft. Vessels of deep draft should not cross the shallower parts. Navigation inside the banks to within 3 miles of the land is safe, except on the W side of North Andaman Island, to which a berth of 6 miles should be given.

**Winds—Weather.**—The Southwest Monsoon commences in the Nicobar Islands about mid-May and rapidly extends over the Andaman Islands. From June through September the wind blows from the W through SW at Force 4 to 6. During the months of October and November, the winds are variable with Force 1 to 3. The Northeast Monsoon prevails from December through March, the prevailing wind is between N and E at Force 2 to 4. During the months of April and early May the winds are variable with Force 1 to 3.

During the months immediately preceding and following the Southwest Monsoon, these island groups lie athwart or close to the tracks of the tropical disturbances of the Bay of Bengal.

The temperatures are relatively high, with little variation from one place to another or between one month and the next. The humidity is high at all times. The mean daily temperature is 27°C; the mean daily minimum temperature is 21°C.

Heavy rains, with a yearly average of 3,200mm, occur in these island groups. Rains occur on the W slopes from mid-May through September, and on the east slopes from October

through mid-December. The rainfall is variable both as to seasons and to geographical positions. In the N part of the Andaman Islands, heavy rainfall (over 250mm per month) falls from June through September. More moderate amounts (125 to 225mm per month) occur in May, October, and November. The months of December through April are relatively dry. In the S part of the Andaman Islands, the heaviest rainfall occurs from May through early November. More moderate amounts fall from early November through December, and relatively small amounts from January through April.

In the Nicobar Islands, heavy rains occur from May through November. More moderate amounts occur from December through mid-January, and relatively small amounts from January through April.

As a rule, the islands with the higher elevation receive the greatest amount of rain.

Thunderstorm frequency varies from island to island. The greatest activity occurs during those months immediately preceding and the first few weeks immediately following the onset of the Southwest Monsoon. Thunderstorms occur most frequently during May and June at Port Blair, when about 4 to 6 days per month have them. In November, thunderstorms occur on the average of 3 days per month at this port.

The cloud cover is more uniform, with cloud amounts increasing from N to S. During the Southwest Monsoon, there is little diurnal variation in cloud cover. During the remainder of the year the cloud cover is more extensive in the afternoons. The cloudiest months are June through September. During these months the cloud coverage amounts to 70 to 80 per cent, with few clear days. February and March are the months with least cloud coverage. During these months there is 30 to 40 per cent coverage in the N and 50 to 60 per cent coverage in the S.

The visibility is good except during heavy rains.

**Tides—Currents.**—The currents in the vicinity of Alguada Reefs are greatly influenced by the winds, especially at neaps. The tidal currents set SE on the rising tide and NW on the falling tide. During the Northeast Monsoon, the ebb current at springs begins about 2 hours after HW, and runs until LW, at a rate of 1 knot to 2 knots. The period of slack water is very short.

Tide rips have been reported in a position about 19 miles W of Alguada Reefs.

The tidal currents in Preparis North Channel appear to set SE on the rising tide and NW on the falling tide. During the Northeast Monsoon, there is a strong S current of 1 to 1.5 knots, which at neaps entirely overcomes the NW tidal currents. A N current of 0.5 to 0.8 knot has been experienced. The S current has a rate of about 2 knots.

The tidal currents in South Preparis Channel in the vicinity of Table Island are strong and often set toward the rocks.

The tidal currents set very strongly through Marshall Channel and heavy tide races occur. The rate is upwards of 5 knots in the fairway and about 2 knots past the N and S ends of Little Coco Island.

The tidal currents in the vicinity of the Coco Islands set E on the rising tide and W on the falling tide. In settled weather, the tidal currents appear to turn at HW and LW. Heavy tide races are found off all salient points.

The tidal currents in Coco Channel, during settled weather, are regular, the current setting E on the rising tide and W on the falling tide, at rates of 1 knot to 2 knots at springs. Strong winds influence the tidal currents at times, even reducing them. During the Northeast Monsoon, the current frequently sets NW through Coco Channel, but during the Southwest Monsoon the set is mostly to the E. Tide rips occur in the vicinity of all shoal water in Coco Channel.

The tidal currents during the Northeast Monsoon set SW and S along both the E and W coasts of the Andaman Islands. During the Southwest Monsoon the set is N to E.

In light breezes and fine weather, the tidal currents set E and W into Duncan Passage, but sometimes a current caused by the prevailing winds sets through it.

Within a few miles of the Nicobar Islands, the tidal currents usually set NE on the rising tide and SW on the falling tide. The tidal currents attain a rate of 3 to 4 knots in the channels between the islands. Well offshore of these islands, the currents usually set with the prevailing wind. The rate, at times about 2 knots, and direction are variable. Heavy overfalls were reported in a position about 110 miles WSW of the S end of Great Nicobar Island.

The currents in the vicinity of Car Nicobar Island flow rapidly enough to cause tide races, particularly N of the island. During the month of February, usually a calm month, from a position about 6 to 8 miles E of the island, a current setting SW at a rate of 7 knots has been experienced about 1.5 hours after HW.

The tidal currents in the vicinity of Chowra Island set NE during the rising tide and SW during the falling tide.

The tidal currents in Sombrero Channel set NW on the rising tide and SE on the falling tide. These currents are reported to attain a rate of 5 knots at springs.

The tidal currents in St. Georges Channel are strong and set NE through the channel on the rising tide, and SW through the channel on the falling tide.

**Caution.**—Although the shoals off the N end of the Andaman Islands have been examined, there is a possibility that depths less than those charted may exist. Vessels are advised not to pass over them because these shoals are not always visible from aloft.

The Andaman Islands lie on fault line, but no earthquakes have been reported in recent years.

## Preparis Island

**9.2 Preparis Island** (14°53'N., 93°42'E.), 81m high, narrow, and wooded, slopes gradually to the sea. A shoal spit extends about 3.5 miles S from the S end of this island. Preparis Island has been reported to be a good radar target up to 24 miles and has been reported to be identifiable with charted features by radar up to 22 miles.

**Cow and Calf Islets** (14°57'N., 93°43'E.), flat-topped, three in number, and about 23m high, lie close together about 1.8 miles N of Preparis Island.

Some islets lie on a reef about 1.3 miles W of Preparis Island.

A 12.2m high pinnacle rock lies on a reef about 4 miles SW of the S end of Preparis Island. A 1.8m high rock lies on a reef about 0.5 mile S of this reef.

Several coral heads, with depths of 3.7m and less, lie within 1.3 miles of the SE side of Preparis Island. A rock, awash, lies about 0.8 mile S of the N end of the island and 0.3 mile offshore. A pinnacle rock, with a least depth of 2.7m, lies 1.8 miles E of the N end of the island.

During the Southwest Monsoon, anchorage can be taken off the E side of Preparis Island, in depths of 21.9 to 25.6m. During the Northeast Monsoon, anchorage can be taken on the opposite side of the island.

**Preparis North Channel** (15°22'N., 93°48'E.), deep and clear in its central part, lies between Preparis Island and Alguada Reef, about 55 miles to the NNE. **Thalia Shoal** (15°15'N., 93°48'E.), with a least depth of 18.3m, lies about 21.5 miles NNE of the N end of Preparis Island. Irregular depths surround this shoal.

Alguada Reef, Hugh Rose Rock, and the dangers which lie between Hugh Rose Rock and the Bassein River Entrance to the NE have been previously described in [paragraph 8.4](#).

**Preparis South Channel** (14°28'N., 93°33'E.), which lies between Preparis Islands and the Coco Islands to the S, has depths of 200 to 275m and a width of 34 miles between the dangers on either side.

A radar conspicuous wreck, stranded in 1980, lies at the W side of the islet 2.5 miles W of the S end of Preparis Island.

**Caution.**—Less water than charted has been reported to lie Preparis Island has been reported to lie about 3.5 miles W of its charted position. All of the Andaman Islands have been reported to lie 1.3 miles of their charted positions.

Preparis South Channel is dangerous to diving submarines, because sunken mines may still exist in this area.

## The Coco Islands—Coco Channel

**9.3** The Coco Islands consist of Table Island, Great Coco Island, and Little Coco Island.

**Table Island** (14°11'N., 93°23'E.), which is densely wooded on all except its SW side, appears as a flat, level surface with steep-to sides on all bearings. The island has been reported to be a good radar target up to 16 miles.

**Slipper Island** (14°11'N., 93°22'E.), 34m high and grass covered, lies about 0.2 mile NW of the NW end of Table Island. The two islands are connected by a drying reef with a stepping-stone causeway on it. A few trees lie near the summit of the island; a remarkable pillar rock lies near its W extremity. Foul ground extends 0.3 mile W and N from Slipper Island, and depths of 9.1m extend 0.8 mile NW from the island with depths of 3.7 and 5.5m over the outer end.

Numerous rocks and shoals, the positions of which may best be seen on the chart, lie off Table Island in depths of less than 18.3m. A detached 11.9m patch lies about 1.3 miles NE of the island, and irregular depths, which cause tide rips, extend about 4.5 miles NE from the island.

During the Northeast Monsoon, anchorage can be taken about 0.3 mile offshore in Table Bay, on the SW side of Table Island, in a depth of 18.3m, rock, with the lighthouse bearing 012°. When anchoring, care is necessary neither to be too close to the reef, nor to far out where the currents are strong.

During the Southwest Monsoon, anchorage can be taken about 0.4 mile off the N side of the island, in depths of 16.5 to 21.9m, sand and rock, with the lighthouse bearing 180°. This anchorage is exposed.

In Table Bay, a small, short jetty extends from the shore close S of the lighthouse. The channel approach to this jetty is marked by a white square board in line with the E white-washed gate of the lighthouse fence.

The landing place on the N side of the island is approached through a channel, about 91.5m wide at its outer end, and 46m at its inner end. Iron stakes mark the reefs on either side.

**Marshall Channel** (14°10'N., 93°22'E.), which lies between Table Island and Great Coco Island to the S, has depths of 9.1 to 18.3m in the fairway seaward of the fringing reefs. Strong currents set through this channel.

## The Coco Islands—Table Island

**9.4 Great Coco Island** (14°06'N., 93°23'E.), densely wooded and steep on its W side, slopes gradually to the sea on its E side. There are no off-lying dangers, but rocky foul ground extends 0.3 mile from its N end and 0.4 mile from its NW end.

Great Coco Island has been reported to be a good radar target up to 23 miles.

**Pollock Bay** (14°09'N., 93°23'E.) lies between the N point of the island and Pechee Point, about 1 mile to the SE. This latter point consists of a 46m high bluff topped by a few trees. The outer part of the bay has depths of 7.3 to 9.1m, whereas its inner part is fouled by rocky reefs. Binnacle Rock, 4m high, lies on the outer edge of this reef.

**Ford Bay** (14°08'N., 93°23'E.), entered S of Pechee Point, has depths of 9.1 to 18.3m in its outer part, but shoals rapidly in its inner part. Rat Islet, 38m high and wooded, lies in the S part of the bay about 1 mile S of Pechee Point.

Anchorage can be taken in the outer part of Ford Bay, in depths of 12.8 to 18.3m, about 0.7 mile N of Rat Islet. Shelter is provided against strong W winds.

**Jerry Island** (14°03'N., 93°22'E.), 30m high, is connected to the S end of Great Coco Island by a reef. Rocky ground, with uneven depths, extends about 2 miles S from Jerry Island.

**Little Coco Island** (14°00'N., 93°14'E.), densely wooded and fairly high, is separated from Great Coco Island and Jerry Island by Alexander Channel. This channel is free of dangers in the fairway, but strong currents and tide rips are encountered. Vessels using this channel should give the S end of Jerry Island a berth of at least 3 miles.

Irregular depths extend about 1.8 miles N, and foul, uneven ground extends about 4 miles S from Little Coco Island.

**Investigator Patch** (13°57'N., 93°16'E.), an area of shoal, rocky ground with a least depth of 2.7m, lies about 2 miles ESE of the S end of the island. Rocks, some of which are awash, lie on the foul ground which extends 4 miles S from the end of the island. Middle Rock, with a depth of less than 1.8m, lies 2 miles S of the above end of the island. Daphne Rock, with a least depth of 5m or less, lies 0.5 mile farther S. South Patch, with a least depth of 12.8m or less, lies 1.5 miles SSE of Daphne Rock.

During E winds, sheltered anchorage can be taken, in depths of 16.5 to 21.9m, sand and mud, in Lambert Bay on the W side

of the island. The bottom on the E side of the island is rocky and foul.

**Coco Channel** (13°47'N., 93°12'E.), which separates Little Coco Island from the Andaman Islands to the S, is wide and deep. The S side of the channel has irregular depths over a coral bottom. A 18.3m patch, which is marked by a heavy sea during strong winds, lies 13 miles SSW of Little Coco Island.

## The Andaman Islands

**9.5 Landfall Island** (13°39'N., 93°02'E.), 79m high in its N part, is fringed by a reef which extends up to 0.5 mile offshore in places. Landfall Rocks, 12.8m high, lie on the reef fringing the S end of the island.

East Island lies 0.8 mile E of Landfall Island. The intervening channel has a least depth 5.5m and provides anchorage to small craft. The anchorage is approached from the S. East Island Light is shown from a white, round metal tower with red bands standing on the S summit of East Island; a racon is situated at the light.

Channel Islet, a 29m high rock, lies 0.3 mile off the E side of Landfall Island near the edge of the reef which fringes that island.

**Hickman Shoal** (13°42'N., 93°59'E.), which consists of two small patches, lies about 2 miles N of the NW end of Landfall Island. The patches have a least depth of 8.2m. Several patches, with depths of 5 to 10.1m, lie between Hickman Shoal and Landfall Island. Shoals, with depths of less than 9.1m, lie within 2 miles NW of the N end of the island.

**Ranger Reef** (13°39'N., 93°07'E.), with a least depth of 1.8m, lies 2 miles E of the N end of East Island. Two 9.1m patches lie within 0.8 mile N of Ranger Reef. In heavy weather, the reef is marked by breakers, but at other times it is difficult to identify.

**9.6 Jackson Ledge** (13°39'N., 93°08'E.), with a least depth of 3.2m, lies about 3.3 miles E of the NE end of East Island and is marked by tide rips. An 11m detached patch lies 3 miles ESE of the ledge. An 8.4m patch lies 2.5 miles NE of the ledge.

The Andaman Islands, a group of 204 islands, islets and rocks, lie between the parallels of 10°30'N and 13°40'N and the meridians of 92°11'E and 94°13'E. The principal islands consist of North Andaman Island, South Andaman Island, Middle Andaman Island, Baratang Island, and Rutland Island. Little Andaman Island lies about 30 miles farther S. These islands are known as the Great Andamans. North Andaman Island and Little Andaman Island have been reported to be good radar targets at distances up to 18 miles. South Andaman Island has been reported to be a good radar target at distances up to 17 miles.

The principal groups of small islands consist of the Richies Archipelago, off the E side of Baratang Island, and the Labyrinth Islands, off the SW coast of South Andaman Island. The principal off-lying islands are North Sentinel Island, Barren Island, and Narcondam Island. The latter island is an extinct volcano which lies 70 miles E of the main group.

The Andaman Islands consist of a mass of very high hills enclosing very narrow valleys. Most of the islands are covered with dense tropical growth.

The shores of the islands are deeply indented, forming a number of harbors, some of which are very spacious. The principal ports or harbors on the W coasts of the islands consist of Temple Sound, Port Anson, Port Campbell, Port Mouat, and Macpherson Strait. Those which indent the E coasts consist of Port Cornwallis, Stewart Sound, Elphinstone Harbor, Colebrook Passage, Port Meadows, and Port Blair. The latter port is the administrative center for the whole group.

**9.7** The reefs and dangers off the W coasts of the Andaman Islands are more extensive than those off the E coast, and extend in places up to 21 miles offshore.

The surf breaks a considerable distance offshore on the E coast of the Andaman Islands because of the rocky ledges and foul ground which fringe these shores.

West Coral Bank, Middle Bank, and South Bank, composed of coral and sand, lie off the W side of the Andaman Islands. The water over them is very clear and judging from the appearance of the bottom, it seems probable that rollers break on Middle Bank during the Southwest Monsoon but not on the others. The 183m curve passes close W of these banks, and the increase of swell usually indicates their general location.

**West Coral Bank** (13°13'N., 93°31'E.), the N of these banks, lies between 15 and 23 miles W of North Andaman Island. A least depth of 11m lies on the N part of the bank about 14 miles NW of **North Reef Island** (13°05'N., 92°43'E.).

**Middle Bank** (12°32'N., 92°25'E.) has a least depth of 6.9m, which lies about 38 miles SSW of North Reef Island.

**South Bank** (12°16'N., 92°26'E.), about 8 miles in extent, lies about 18 miles SW of **Flat Island** (12°32'N., 92°41'E.). The central part of the bank has a least depth of 11m.

**Dalrymple Bank** (10°31'N., 92°14'E.), about 7 miles in extent and almost circular in shape, lies centered about 9 miles W of the SW end of Little Andaman Island. The depths near the center range from 10.1 to 16.5m, but elsewhere they range from 20.1 to 36.6m. Heavy rollers mark this bank during the Southwest Monsoon.

In 1951, a 11m patch was reported to lie about 23 miles WSW of the SW end of Little Andaman Island.

**Invisible Bank** (11°10'N., 93°31'E.), about 37 miles long and 9 miles wide, lies centered about 46 miles E of the **Cinque Islands** (11°17'N., 92°43'E.). Flat Rock, 27m in diameter and awash, lies near the center which is the shallowest part of the bank.

**9.8 North Sentinel Island** (11°33'N., 92°14'E.), separated from the Labyrinth Islands by a wide, deep channel, is 122m high, densely wooded, and has a level ridge which slopes to the low NW point. Depths of 42.1 to 95.1m are found in this channel.

North Sentinel Island has been reported to be a good radar target up to 13 miles.

No dangers, except those S of the anchorage, exist outside the reef which extends between 0.5 and 0.8 mile from the shore around the island. A dangerous wreck lies about 2.5 miles W of the S part of the island. Constance Islet, 12m high, is the largest of four islets which lie on this reef off the SE point of the island.

Anchorage can be taken, in a depth of 18.3m, 0.5 mile off the E side of the North Sentinel Island with its NE point bearing 283°. Sunken dangers exist S of this fair weather anchorage.

In fair weather, small vessels with local knowledge can anchor, in a depth of 21.9m, about 0.5 mile off an entrance through the reef which lies close E of a small islet on the S side of the island. This anchorage lies about 0.8 mile W of Constance Islet.

**South Sentinel Island** (10°58'N., 92°14'E.), 44m high to the tops of the trees and level topped, lies 15 miles NW of Little Andaman Island. Its appearance is much the same on all bearings. A bank, as defined by the 36m curve, surrounds the island and extends about 6 miles NW from it. Considerable depths exist in the channel between this island and Little Andaman Island.

Anchorage can be taken off the W side of South Sentinel Island with its center bearing 101°, distant 0.9 mile. Anchorage can also be taken off the E side of the island in similar depths with its center bearing 281°, distant 0.9 mile.

**Narcondam Island** (13°26'N., 94°17'E.), an extinct volcano 710m high, lies about 74 miles E of the N end of North Andaman Island. Its summit is shaped like a truncated cone. Barata Bay on the E side of the island can be identified by a grove of palm trees. A light is shown from a white framework tower on the NW side of the island; the visible sector bears between 058° and 179°.

Narcondam Island has been reported to be a good radar target up to 27 miles.

In 1946, and subsequently through 1984, the island has been reported to lie 2.3 miles farther W than charted.

**9.9 Barren Island** (12°16'N., 93°51'E.), 353m high with densely-wooded cliffs rising sheer from the sea, lies about 72 miles SSW of Narcondam Island. The outer slopes of the crater, which lies in the center of the island, is covered with foliage. The interior of the crater is visible through a gap on its W side. A thin column of steam rises from a sulphur bed on the crater side and near the summit. No known dangers exist within 0.5 mile of the island. A light is shown from a white metal tower on the NW end of the island.

Barren Island has been reported to be a good radar target up to 24 miles.

Anchorage can be taken, in a depth of 27.4m, about 0.2 mile off a beach on the SW side of the island. The currents were reported to set SE at a rate of 2.5 knots at half tide at this anchorage.

The tidal currents in Cleugh Passage, between Landfall Island and North Andaman Island, set about ESE on the rising tide and WNW on the falling tide. The rate at springs is about 1.5 knots. Tide rips occur throughout the passage.

The current off the seaward side of the Labyrinth Islands, which are located off the SW side of South Andaman Island, sets S, but it occasionally reverses its direction for periods of about 24 hours.

The tidal currents in Macpherson Strait, between Little Andaman Island and Rutland Island, set E on the rising tide, and W on the falling tide, turning at about the times of high and LW. The tidal currents are strong only in the narrows NE of Rifleman Island.

The tidal currents in Diligent Strait, between the Ritchies Archipelago and Baratang Island, are weak, but with strong S winds there is probably a considerable N set in the narrowest part of the strait between Wilson Island and Strait Island.

## Cleugh Passage

**9.10 Cape Price** (13°35'N., 93°02'E.), the N end of North Andaman Island, is densely wooded and slopes gradually to the sea. The S shore of Cleugh Passage, between Cape Price and Cape Thornhill, about 7 miles WSW, is indented, densely wooded, and fringed by mangroves in places.

**Cleugh Passage** (13°36'N., 93°02'E.), which separates Landfall Island and East Island from North Andaman Island, is available to vessels with local knowledge. Passage through it is not recommended because of the strong currents and lack of navigational aids. Depths in the fairway range from 20.1 to 56.7m, but patches of less than 18.3m are numerous. Patches, with depths of 9.1 and 10.5m, lie 1 and 2 miles ESE of Passage Rock.

**Cleugh Rocks** (13°37'N., 92°58'E.), about 1.5 miles SSW of the SW end of Landfall Island, lie on a reef, the W part of which dries 1.8m.

**Passage Rock** (13°36'N., 93°00'E.) awash, steep-to and marked by breakers, lies about 0.5 mile SE of Cleugh Rocks and almost in mid-channel.

Wedge Rock, about 1.8m high and fringed by a drying reef, lies 1.5 miles WNW of Cape Price. A shoal, with depths of 4.6 to 8.2m, lies 1 mile W of Wedge Rock. A 0.9m high rock, surrounded by depths of less than 9.1m, lies 0.5 mile S of this shoal about 2.7 miles W of Cape Price.

**One Fathom Patch** (13°36'N., 93°02'E.), which breaks in heavy weather, has a least depth of 1.8m and lies 0.6 mile N of Cape Price. Depths of 6.4 to 11.9m lie between this danger and Cape Price. A 5m patch lies about 0.5 mile W of the Cape.

**West Island** (13°36'N., 93°54'E.), 53m high, reef-fringed, and densely wooded, lies in the W approach to Cleugh Passage, about 3.5 miles NNW of Cape Thornhill. Depths of less than 9.1m lie up to 0.5 mile off the island. Several patches, with depths of 7.3 to 8.7m lie between West Island and Wedge Rock.

## North Andaman Island —West Coast

**9.11 Between Cape Thornhill** (13°32'N., 92°56'E.) and Shark Islet, about 22 miles SSW, the coast is backed some distance inland by many conspicuous summits.

**Taylor Hill** (13°27'N., 92°54'E.) about 6.3 miles SSE of Cape Thornhill, is a long, ill-defined summit, 196m high. D'Oyley Peak, 159m high and pointed, lies 8 miles S of the same cape. Tasou Hill, 240m high and having three summits of nearly equal height with only a slight dip between them, rises 6.5 miles farther SSW. Tradikeli Hill, 335m high, a sharp ridge with its peak at its S end, lies 8 miles S of D'Oyley Hill. Saddle North Peak, 686m high and having a flat top with a sharp peak at its N end, rises about 23 miles S of Cape Price. Saddle Hill, 731m high, lies 2.8 miles S of Saddle North Peak and has a rounded summit. The peak and the hill are covered with vegetation and appear saddle-shaped when viewed from the W or E.

Several conspicuous hills lie near the W coast of the island. Brown's Hill, 91m high, lies 1 mile SE of Cape Thornhill. Jessop Hill, 134m high, lies on a point at the head of Hudson Bay about 15 miles SSW of the same cape. Lewis Hill, 110m high, lies on a peninsula separating the above bay from Casuarina Bay about 1.3 miles S of Jessop Hill. All of the above hills have twin summits.

Between Cape Thornhill and Bluff Point, about 4.5 miles SW, the coast is somewhat indented and lined with mangroves. The latter bold, cliffy point is 70m high, has an irregular summit, and appears as three peaks when viewed from the SSW.

**Thornhill Island** (13°32'N., 92°55'E.), 77m high, is separated from Cape Thornhill by a narrow, shallow channel.

**White Cliff Island** (13°32'N., 92°53'E.), 33m high, lies 1.5 miles W of Thornhill Island. Cliffs, 20m high and dark colored, back the N end of the island.

**Reef Island** (13°30'N., 92°53'E.) is 5.5m high to the tops of the trees. Shoal ground, as defined by the 6m curve, extends almost 1 mile WSW from the SW point of the island. Irregular depths of less than 18.3m lie up to 1.3 miles farther WSW.

**Temple Sound** (13°25'N., 92°51'E.) lies between Shearme Island on the E, and Paget Island and Point Island on the N and W. Shearme Island is 57m high and, except in the narrow channel separating it from the mainland to the E, is fringed by a drying reef. Oldham Rocks, 3m high, lie about 0.5 mile NNE of the NW point of Shearme Island; Sugarloaf Island, a prominent conical rock, 20m high, lies about 1.5 miles SSW of the SW end of Shearme Island and on the SE side of the entrance of the sound.

**9.12 Paget Island** (13°26'N., 92°50'E.), about 0.8 mile NW of the NW end of Shearme Island, is 76m high to the tops of the trees and fringed by a drying reef on all except part of its E side. A spit, with depths of less than 5.5m, extends about 0.8 mile N from its NE point. Cliffs, about 30m high, line the SE side of Paget Island.

**Point Island** (13°24'N., 92°50'E.), about 0.5 mile SW of Paget Island, is tree-covered. A drying reef almost surrounds the island and extends about 0.3 mile from its N and SW sides. A least depth of 6.4m exists in the fairway of the channel separating Paget and Point Islands.

In the N approach to Temple Sound, between Paget Island to the W and the coast between Bluff Point and Shearme Island to the E, there are several rocks, awash and sunken, and some shoals, the positions of which may best be seen on the chart.

In the S approach, Bolton Shoal, which lies almost in mid-channel between the S end of Point Island, and Sugarloaf Island, about 2.5 miles SSE, has a least depth of 9.1m.

A bank, on which the depths are less than 18.3m, extends almost 1 mile SSE from the S end of Point Island and almost joins Bolton Shoal.

Anchorage, sheltered from all except SW winds, can be taken, in depths of 18.3 to 21.9m, mud and sand, in the middle of the sound about midway between Shearme and Point Islands. Small vessels can anchor, in a depth of 14.6m, about 0.3 mile W of Oldham Rocks.

The depths in Temple Sound are very irregular and caution is advised both when entering and when anchoring.



The coast between **Point Stuart** (13°22'N., 92°51'E.) and the W entrance of Austin Strait, about 29 miles to the S, is very irregular and fronted by numerous islets, rocks and shoals. Hudson Bay, entered about 5 miles S of Point Stuart and Casuarina Bay, 3 miles farther S, are both shallow and exposed to the W wind and seas.

**Mackey Bank** (13°20'N., 92°46'E.), with a least depth of 7.3m, lies about 6 miles SW of Point Island. Vessels should give this bank a wide berth when passing.

**Shark Island** (13°12'N., 92°46'E.), about 12.3 miles SSW of the same island, is sandy and covered with bushes about 6.1m high. A rocky reef surrounds this island. Vessels should give this island a wide berth when passing.

**9.13 North Reef Island** (13°05'N., 92°43'E.), low, flat, wooded, and marshy, lies 6.5 miles SSW of Shark Island. A reef extends about 2 miles S from the S end of the island.

**Latouche Island** (13°05'N., 92°43'E.) lies close off the NE point of North Reef Island. A spit extends about 0.3 mile S from Latouche Island. A 3.7m patch lies about 1.5 miles SE of the E end of North Reef Island.

**Interview Island** (12°55'N., 92°42'E.) lies 4.5 miles S of the S end of North Reef Island. The island is low at its N end, but rises gradually to a height of 113m. The highest part of the island is a wooded plateau. A rocky pinnacle, 7m high, lies close off a cliff on the S end of the island. Foul ground extends about 2 miles NNE from the island. A light is shown from the W side of the island.

**South Reef Island** (12°47'N., 92°40'E.) lies about 1 mile SW of Interview Island on a stony spit, as defined by the 6m curve, that extends about 3 miles S from that island.

**Anchorage.**—Vessels with local knowledge can anchor, in depths of 11.8 to 16.4m, about 2 miles E of the S end of North Reef Island. Care should be taken to avoid the shoal patches which lie 1.5 and 2 miles ENE of the S end of the island. Vessels approaching from the NW should round Latouche Island about 0.5 mile off in order to avoid a 6.4m shoal which lies 1.5 miles N of that island.

**Austin Strait** (12°53'N., 92°50'E.), which separates North Andaman Island from Middle Andaman Island, is shoal and can only be used by boats. The shallowest parts are over the bars at either entrance. The W entrance, which lies about 8.5 miles SE of the N end of Interview Island, is approached through Interview Sound which lies between the N part of Interview Island and the mainland. Numerous islands, rocks, and shoals lie in the sound.

**White Mountain** (12°51'N., 92°55'E.), 361m high, lies at the N end of the E coastal range of Middle Andaman Island, about 7 miles ESE of the W entrance of Austin Strait. The mountain appears whale-backed when viewed from the SW.

The W coast of the island, between Tuft Island about 6 miles SSE of the S end of Interview Island, and the W entrance of Andaman Strait, is bold and precipitous. Tuft Island is sandy and about 3m high.

**Port Andaman** (12°44'N., 92°42'E.), of little commercial importance, lies between South Reef Island and Anderson Island. This latter island lies close to and parallel with Middle Andaman Island. The water at the entrance is muddy and irregular depths exist over a rocky bottom. Port Andaman leads

N to Interview Passage, which lies between Interview Island to the W and Anderson and Bennett Islands to the E. This area is dangerous and should be avoided.

Buchanan Passage, which lies between Anderson Island and the mainland, is foul.

Rocky Point, the extremity of a promontory, lies about 4.5 miles SSW of Tuft Island. Hump Island lies about 3 miles S of Tuft Island and Flat Island lies about 6 miles farther S.

A shoal, with a least depth of 11m, lies 2.5 miles W of Rocky Point.

## **Andaman Strait—West Entrance**

**9.14** The W entrance of Andaman Strait, which separates Middle Andaman Island from South Andaman Island, is divided into two channels by Spike Island. Fairly deep water exists in the outer part of the main entrance which lies N of the latter island. The channel is entered between the W entrance point of Foul Bay and Breaker Point, the NW end of Spike Island. The channel abreast Foul Bay is about 0.4 mile wide between the shoals on either side, but narrows to a width of 0.2 mile between the reef extending from Steep Point, the NE end of Spike Island and Brook Point to the N.

Andaman Strait bifurcates about 0.5 mile E of Steep Point. Homfray Strait, the N channel, separates Middle Andaman Island from Bara. The S channel, which separates the latter island from South Andaman Island, retains the name of Andaman Strait. That part of the channel between Spike Island to the W and Stoa Island, Mangrove Island, and Tala Kaicha Island, to the E, is known as Port Anson.

The S part of the W entrance of Andaman Strait, between Spike Island and the N end of South Andaman Island, about 0.3 mile SW, is fairly deep. This narrow, intricate channel is considered to be dangerous.

## **Port Anson—Approaches**

**9.15 Foul Bay** (12°19'N., 92°42'E.), on the N side of the main entrance of Andaman Strait, is fouled by reefs. The coast between this bay and Brooke Point, about 1.8 miles SSE, is fringed by a reef which extends about 0.3 mile offshore in places. Brooke Point rises to a rounded knoll, 96m high, close N of its extremity.

Foul ground extends almost 1 mile S from the W point of Foul Bay. A rock, with a depth of less than 1.8m, lies near the S end of this reef. Half-tide Rock, which dries 0.9m, lies 0.6 mile S of the same point.

**Spike Island** (12°16'N., 92°43'E.), whose N side forms the S side of the entrance channel, is 136m high at its N end and 94m high at its S end. The N coast of the island between Breaker Point and Steep Point is fringed by a narrow reef. A vessel drawing 4.6m reported grounding about 0.4 mile E of Breaker Point. Braganza Ledge, almost 0.5 mile NW of Breaker Point, has a least depth of 8.2m.

The W side of Spike Island is fringed by a reef which extends up to 0.2 mile offshore in places. Long Rock, 1.2m high, lies 1.5 miles SSW of Breaker Point. Cingue Rocks, two groups of above-water rocks, lie about 0.3 and 0.5 mile S of Long Rock.

**Taylor Patches** (12°16'N., 92°42'E.), which have a least depth of 8.5m, lie about 1.5 miles SW of Breaker Point. A shoal area, with a least depth of 7.3m, lies 0.5 mile W of Long Rock.

**Bluff Island** (12°15'N., 92°42'E.), 30m high to the tops of the trees, lies in the mouth of the S entrance channel, close N of the N end of South Andaman Island. A drying reef extends 0.3 mile W and 0.5 mile N from Bluff Island.

## Port Anson

**9.16 Port Anson** (12°16'N., 92°44'E.) lies between Spike Island to the W, and Stoa Island, Mangrove Island, and Tala Kaicha Island to the E. Depths of 12.8 to 20m exist in the central part of the bay. All of the above islands are reef-fringed.

**Whales Reef** (12°15'N., 92°44'E.) lies about 0.8 mile NW of the S end of Tala Kaicha Island. Two small reefs lie S of this reef.

**Anchorage.**—Anchorage can be taken in the N part of Port Anson, in depths of 16.5 to 18.3m, mud, about midway between Stoa Island and the N part of Spike Island.

**Directions.**—The low mangrove point at the N end of Stoa Island, just open S of Brooke Point, bearing 112°, leads through the channel N of Spike Island. When within about 0.3 mile of Brooke Point, course should be altered to the S passing about midway between Brooke Point and Steep point. After rounding Steep Point, about 0.1 to 0.2 mile distant, course can be shaped for the anchorage.

**9.17 Andaman Strait.**—Vessels drawing 4m have navigated the strait. Small vessels with local knowledge should only attempt the passage during daylight hours, under favorable conditions. Such vessels should follow the directions above and steer S in mid-channel through Port Anson until W of the S end of Mangrove Island. The course should then be altered slightly E until the summit of a conical peak, to the N, is seen bearing 003° and just open E of the nearer hills that form the W side of a large mangrove valley. The course should then be shaped to about 183° and these marks kept on the bearing of 003°, astern. This course leads between the ledge of rocks that dries 2.1m and Whales Reef and other reefs to the S of it.

When the S end of Tala Kaicha Island bears 090°, the course should be altered to about 220° for the S point of Spike Island, giving a berth of about 0.3 mile to the E side of the strait until about 0.6 mile distant from the S point of Spike island. The course should then be altered to pass 0.2 mile E of that point. When the same point bears 000°, the course should be altered to the S to proceed along the W side of the strait, about 0.2 mile off the W shore.

When the W end of **Baby Island** (12°11'N., 92°44'E.), an island with two hillocks, located at the W end of the narrows about 3 miles SSE of the S end of Spike Island, bears about 113°, the course should be altered to pass S of that point and continue in mid-channel through the strait.

Vessels should not attempt to pass through the narrows during the strength of the tidal currents at springs. Slack water occurs at the times of HW and LW at Port Blair. The tidal currents are weak at neaps.

**9.18 Cape Bluff** (12°12'N., 92°40'E.) the NW end of South Andaman Island, is fronted by dangers which extend about 1 mile offshore. The coast between this cape and Petrie Island, about 15.5 miles SSW, is clear of off-lying dangers, except for South Bank, which has been previously described in [paragraph 9.8](#). The shallowest part of this bank lies 15 miles WNW of Cape Bluff.

**Port Campbell** (11°57'N., 92°35'E.), almost landlocked and sheltered, is entered between Petrie Island and Montgomery Island, about 1.8 miles SSW. The cliffs in the vicinity of the port are yellowish-gray sandstone with clearly defined stratum lines.

**Petrie Island** (11°58'N., 92°37'E.), which lies on the N side of the entrance, is joined to the N extremity of Defence Island by reefs and shoals. This latter island forms part of the E side of the port.

An area of shoal ground extends 0.5 mile S from Petrie Island and a similar shoal, with some rocks awash, extends about 1 mile W from the middle part of Defence Island.

**Montgomery Island** (11°56'N., 92°35'E.), on the S side of the entrance, is joined to the mainland by foul ground. The E side of this island is fringed by foul ground. A detached patch, with depths of 9.1 to 11.9m, lies about 0.8 mile NE of Montgomery Island.

**Anchorage.**—Vessels can anchor in the entrance, in a depth of 21.9m, about 0.8 mile NE of Montgomery Island. Anchorage can be taken, in a depth of 23.8m, a little over 1 mile SE of the same island.

**Directions.**—Vessels can approach the latter anchorage in depths of not less than 18.3m by passing close N of the previously-mentioned 9.1 to 11.9m patch, on a 090° course until the W point of Petrie Island bears 000°. A course of 180° should then be steered until the N end of Montgomery Island bears 305°. A course of 130° should then be steered and anchorage taken when the NW end of Defence Island bears 003°.

**9.19** The coast between Montgomery Island and Palmer Point, about 15 miles to the S, has not been closely examined. A reef fringes this section of coast and an area of shoal ground extends up to 2.5 miles S from Palmer Point. A 5.5m patch lies near the S end of this shoal ground.

**Constance Bay** (11°42'N., 92°36'E.), entered between Palmer Point and Florence Point, about 2 miles to the SE, is foul and has not been closely examined.

**Port Mouat** (11°37'N., 92°38'E.), entered between Perseus Point and Andromeda Point about 0.8 mile S, extends about 1.5 miles E through a narrow channel to a landlocked basin.

The entrance channel between the extending reefs on either side is about 0.3 mile wide, but about 1 mile to the E the channel narrows to a width of only about 91m. Two detached patches, having depths of 4.3 and 4.6m, lie in the middle of the narrowest part of the channel. Depths E and W of these patches range from 12.8 to 20m. Depths in the landlocked basin to the E range from 7.3 to 10m.

Small fishing vessels with local knowledge frequently use the port as an anchorage. It is advisable to buoy the two shoal patches which lie in the narrowest part of the channel prior to entering.



## The Labyrinth Islands

**9.20 The Labyrinth Islands** (11°35'N., 92°3'E.), consisting of 14 islands and islets, lie off the SW side of South Andaman Island. All of these islands are rocky and fringed by reefs which extend up to 1 mile offshore along their seaward faces. Large blocks of these extending reefs have been broken off by the sea during the Southwest Monsoon and have been tossed up onto the reefs where they appear as rocky boulders.

**Tarmugli Island** (11°35'N., 92°34'E.), the NW island of the group, is 78m high and lies with Frederick Point, its NW end, about 4.5 miles WSW of Perseus Point. Two rocks, each 4.6m high, lie close off the cliffy S side of the island.

A large area of foul ground extends up to 2.5 miles N from the reef which fringes the N coast of the island. Allen Patches, partly awash, lie on the outer part of this foul ground about 2 miles NE of Frederick Point. A 5.5m patch was reported to lie about 2.5 miles NE of the same point.

**Boat Island** (11°31'N., 92°34'E.), 27m high, lies on an area of foul ground about 1.8 miles SE of the SW end of Tarmugli Island.

**Malay Island** (11°32'N., 92°37'E.), the SE island of the group, lies 2.3 miles E of Boat Island. A rounded summit, 68m high, rises at its N end. A rocky ledge extends 0.3 mile from the S point of the island.

**Hobday Island** (11°32'N., 92°37'E.), which lies close NE of Malay Island, has a rocky ledge extending 0.5 mile S from its SE side. A ridge, with depths of 6.4 to 8.2m, extends 0.5 mile farther S.

**Redskin Island** (11°33'N., 92°36'E.) lies close NW of Malay Island. It has been reported that Elphinstone Passage, which leads between the W side of Redskin Island and Snob Island, 46m high, is used by local fishing craft proceeding to Port Mouat. Snob Island is 75m high and lies W of Redskin Island.

**Pluto Island** (11°33'N., 92°38'E.), small, rounded, and 49m high, lies close E of Hobday Island. A rock, 0.6m high and said to be a useful mark at all stages of the tide, lies 0.5 mile SSE of Pluto Island.

**Jolly Boys Island** (11°30'N., 92°37'E.), 45m high, lies 0.8 mile NW of Rutland Island. A reef, which is usually visible, fringes the island and extends about 0.8 mile SW from it.

**Grub Island** (11°35'N., 92°36'E.), 24m high with a yellow cliff on it, lies 1.5 miles E of Tarmugli Island.

**9.21 Macpherson Strait** (11°30'N., 92°36'E.) separates South Andaman Island and the Labyrinth Islands from Rutland Island. The recommended channel has a least depth of 7.3m and a least navigable width of 0.2 mile.

The W entrance is narrow and obstructed by reefs as are both shores of the strait. The reef edges are visible in places. That part of the strait which lies between the SW end of South Andaman Island and the NE side of Rutland Island, is clear except for a rocky ledge which extends 0.6 mile ENE from the NE end of the latter island.

Several channels are found in the W approach to Macpherson Strait. Those leading between the islands forming the Labyrinth Islands are mostly foul. The channel between Malay Island and Jolly Boys Island, which leads from Macpherson

Strait to Elphinstone Passage, is navigable by small vessels with local knowledge under favorable conditions.

**Brooker Rock** (11°30'N., 92°36'E.), a pinnacle with a depth of 1.5m, lies on the NW side of the channel about 0.8 mile NW of the SW end of Jolly Boys Island. Because of the discoloration of the water this rock is not usually visible.

Beauchamp Patch, a small coral head awash, lies on the SE side of the channel, 0.4 mile NNE of the NE end of Jolly Boys Island. This rock is not usually visible.

**Peck Shoals** (11°32'N., 92°38'E.), a group of coral heads on the N side of the channel, lie 1.3 miles NNE of the NE end of Jolly Boys Island.

**Anchorage.**—Vessels can anchor, in depths of 11 to 18.3m, on the N side of the E part of the strait with the S end of South Andaman Island bearing 125°, distant 1.5 miles. A white rock on the N side of the strait, about 1.3 miles NNW of the above point, bears 058° and is reported to be a good mark.

**Directions.**—Vessels approaching Macpherson Strait from the W, about 5 miles off the entrance, should steer a course of 051° for Jolly Boys Island until the N end of Pluto Island bears 034°. Pluto Island will then be open, 0.3 of its length E of the SE side of Hobday Island. A 034° course will then lead midway between Brooker Rock and the reef extending SW from Jolly Boys Island. This reef is usually visible. When the summit of this island is abeam course should be altered to 052° with 0.6m rock, located about 0.5 mile SSE of Pluto Island, ahead. When the S end of Boat Island is seen just open S of the S end of Malay Island, bearing 265°, course should be altered to 085° with that mark astern. This course leads between Peck Shoals and Beauchamp Patch.

A mid-channel course can be steered through the narrows. When the above 0.6m rock is abeam, course should be altered so as to pass midway between Rifleman Islet and the NE shore of the strait. A mid-channel course can then be steered through the rest of the strait.

**9.22 Rutland Island** (11°25'N., 92°39'E.), the furthest S of the Andaman Islands, consists of two parts joined together by a low neck of land. Mount Ford, 433m high, lies in the N part of the island; Mount Mayo, 227m high, lies in the S part.

**Woodmason Bay** (11°25'N., 92°37'E.), which indents the W coast of the island, lies with its S part abreast the low neck of land. Depths in the central part of the bay, seaward of the fringing reefs, range from 14.6 to 29.3m.

A bank, as defined by the 20m curve, extends about 4 miles W from the SW side of the island. Twin Islands, flat-topped and wooded, lie on the N side of this bank. East Twin Island is 44m high and West Twin Island is 48m high. A rocky ledge extends 0.8 mile SW from the latter island. Turtle Rock, which dries 1.8m, lies near the extremity of this ledge. A spit extends about 0.8 mile from the rock. A 2.7m patch lies near the extremity of this spit.

**Investigator Rock** (11°20'N., 92°37'E.), with a least depth of 5.5m and marked by rips, lies about 1 mile SSW of the S extremity of Rutland Island. A rocky shoal, with a least depth of 8.2m, lies about 0.3 mile NNE of this rock.

An extensive bank of dead coral, having a least depth of 11m, lies centered about 6.5 miles SW of the SW end of Rutland Island.

The E side of Rutland Island is described in [paragraph 9.45](#). Mariners Strait and the islands and passages to the S are described beginning in [paragraph 9.46](#).

### North Andaman Island—East Side

**9.23** Cape Price, the NE point of North Andaman Island, has been previously described in [paragraph 9.10](#). The coast between the cape and the entrance of Gibb Creek, about 7 miles to the S, is fronted by several rocky patches. Vessels should keep at least 2.5 miles off this coast when passing.

**Union Ledge** (13°32'N., 93°11'E.), almost awash, lies about 6.5 miles ESE of Pocock Island. It lies near the S extremity of an extensive bank on which the irregular depths are less than 36.6m. A patch, with depths of 11 to 14.6m, lies about 0.8 mile E, and a 5.5m patch lies almost 0.5 mile SSW of Union Ledge.

**Pocock Island** (13°34'N., 93°04'E.), 55m high and wooded, lies about 1.8 miles SSE of Cape Price. A rock, awash, lies near the S end of an area of foul ground which extends 0.3 mile S from the island. A drying rock lies 0.3 mile farther S.

A shoal, with a least depth of 5.5m, lies about 4 miles S of Pocock Island.

**Beauchamp Reef** (13°27'N., 93°04'E.), awash, lies almost 1 mile offshore about 6.5 miles S of Pocock Island.

**Cadell Bay** (13°26'N., 93°04'E.), entered between the S entrance point of Gibb Creek and Colvin Point about 2.8 miles SE, provides anchorage during the Southwest Monsoon, in depths of 11 to 12.8m, mud, in the middle of the bay.

Trilby Island lies 0.2 mile ENE of Colvin Point; Tree Islet, 11m high with some vegetation on it, lies 0.3 mile ENE of Trilby Island.

**Bond Harbor** (13°24'N., 93°04'E.), entered about 1 mile SSE of Colvin Point, provides anchorage to small craft, in depths of 12.8 to 14.6m, mud and sand.

The **Table Islands** (13°25'N., 93°07'E.) consist of Excelsior Island and Delgarno Island, both tree-covered, which lie at the N and SW ends, respectively of an extensive shoal on which the depths are less than 5.5m.

Excelsior Island, 29m high, lies about 1.5 miles E of the coast and is fringed by a reef which extends about 0.3 mile from its NE side.

**Delgarno Island** (13°25'N., 93°06'E.), about 61m high, lies 0.8 mile SSW of Excelsior Island and has a clear sandy beach on its NW side and mangroves on its E and S sides. A reef extends about 0.4 mile S from the island.

Both islands are fairly steep-to on their W sides, but foul ground extends about 1 mile SE from Excelsior Island and the same distance E from Delgarno Island. Seaward of the foul ground, irregular depths extend about 1.3 miles E of Excelsior Island and 1.8 miles E of Delgarno Island.

**9.24 North Passage Reef** (13°26'N., 93°06'E.), which dries about 2.4m, lies about 0.5 mile W of Excelsior Island. The passage between this reef and Tree Islet, almost 0.5 mile to the W, is clear of dangers.

Mushroom Reef and Table Reef lie about 0.2 mile apart, 1.8 miles E of the S end of Delgarno Island. Both reefs dry and are usually visible.

South Passage Reef, which dries, lies in the passage between the Table Islands and North Andaman Island. A shoal spit ex-

tends about 0.4 mile ESE from the reef. Vessels using this passage should pass W of this reef.

Vessels passing E of the Table Islands should not shoal to depths of less than 36.6m.

From **Tree Point** (13°23'N., 93°05'E.), the coast extends 1.8 miles SW to the entrance of Thoroughfare Creek. This boat channel separates Smith Island from North Andaman Island and leads into Port Cornwallis.

**Smith Island** (13°20'N., 93°05'E.), 131m high, has a conspicuous tree on its summit. Mangrove Point, the E end of the island, is fronted by a drying reef that extends about 0.2 mile offshore. A 10.1m patch lies about 0.8 mile S of the point.

Temple Island, which forms the S entrance point of Thoroughfare Creek, lies 0.5 mile NE of the N end of Smith Island. A shelving reef extends about 0.3 mile from the E side of Temple Island. A drying ledge lies about 0.3 mile E of the same island.

The **Turtle Islands** (13°22'N., 93°05'E.), two wooded islands about 46m high, lie 1.8 miles NNW of Mangrove Point. Turtle Reef, with a 1.2m high sandbank in its middle, lies 0.5 mile N of the islands. A 7.3m shoal lies 0.5 mile ESE of the reef.

The channel between the Turtle Islands and Smith Island is clear with a fairway depth of not less than 20.1m.

Back Bay, an open bight, lies between Mangrove Point and Ross Island, about 2 miles to the S. The shores of the bay are reef-fringed. Back Bay Shoal, with a least depth of 1.8m, lies about 1 mile SE of Mangrove Point and breaks only in heavy weather. Back Bay Reef dries 1.5m and lies about 1 mile S of Mangrove Point. This reef is usually visible at HW, except when the sea is very smooth. Depths of 11 to 16m exist between Back Bay Shoal and Back Bay Reef.

Tree Island, in line bearing 341° with Cape Price, leads E of Back Bay Shoal. Hand Peak, in line bearing 235° with the SE side of Ross Island, leads SE of the same shoal.

### Port Cornwallis

**9.25 Port Cornwallis** (13°17'N., 93°05'E.) is entered between Ross Island and Dundas Point, about 1.8 miles SSW. Ross Island, 82.6m high, is connected to Smith Island by a sandy spit and is almost entirely surrounded by a drying reef. Dundas Point, sharp and rocky, is fronted by a drying reef which extends about 0.2m NNE from its extremity. The point rises to a height of 124m about 0.4 mile S of its extremity. Hand Peak, 219m high, sharp and wooded, lies 2.8 miles WSW of the same point. A 184m peak lies 1 mile SW of Dundas Point.

There are considerable depths in the entrance and within the harbor. The W part of the harbor is very shallow, but a narrow channel leads between Wharf Island and South Island and then SW into Blair Bay, a shallow extensive backwater.

Shoal ground, as defined by the 10m curve, extends almost 0.5 mile E, and a little over 0.3 mile S from Ross Island. North Reef, which dries 2.4m, lies about 0.3 mile SE of the island. A 5m patch lies close SE of the reef.

A shoal, with a least depth of 6.9m, lies 0.8 mile ENE of Dundas Point.

South Reef, which dries 2.4m, lies about 0.4 mile E; Middle Rock, 0.6m high, lies the same distance SSE of Dundas Point.

Depths of 6.4m and 12.3m lie about 1.3 miles and 1.8 miles, respectively, S of Dundas Point. A 1.2m shoal lies about 1 mile S of the same point. Shoals, with depths of 5 to 9.6m, lie between Middle Rock and the 6.4m patch.

**Minerva Bay** (13°19'N., 93°04'E.) is entered between Hood Point and Perseverance Point, about 1.8 miles NW. A bank, as defined by the 20m curve, extends 0.8 mile SE from the latter point, about halfway across the bay entrance. A rocky shoal, with depths of 10.5 to 16.5m, lies near the outer edge of this bank. A 14.1m patch lies almost 0.8 mile NW of Hood Point. A depth of 11.4m lies about 0.3 mile WNW of the same point.

**Brush Islet** (13°17'N., 93°04'E.), a reef-fringed islet about 6.1m high to the tops of the trees, lies almost in mid-channel about 1 mile SW of Hood Point. A spit, with shallow depths, extends 1 mile W from the islet. A lighted beacon lies on the NW side of Brush Islet.

**9.26 Atalanta Bay** (13°16'N., 93°04'E.) is entered between Dundas Point and Barkely Point, about 1.3 miles WNW. A shoal area, with depths of 2.3 to 11m, lies in the middle of the bay. A 9.6m patch lies 0.4 mile E of Barkely Point.

Ariel Bay is shallow and lies about 1.3 miles W of Barkely Point. An L-shaped jetty extends 0.2m N, then NE from Kopi Point, the E entrance point of the bay. In 1983, works were in progress close SW of Kopi Point.

**Chatham Island** (13°19'N., 93°02'E.), 61m high near its S end and 58m high near its N end, lies about 1 mile W of Perseverance Point.

**Jungle Island** (13°20'N., 93°03'E.), small and low, lies in the S entrance of Thoroughfare Creek, about 1 mile N of Perseverance Point. North Island, 93m high to the tops of the trees, lies 1 mile W of Jungle Island. Wharf Island and South Island lie within 0.5 mile W of North Island. Shoal patches, with a least depth of 6.9m, lie between North Island and Chatham Island.

**Anchorage.**—During the Southwest Monsoon, anchorage can be taken in the entrance of Atalanta Bay. The best anchorage lies NE of Chatham Island, in depths of 11 to 14.6m, mud, about midway between the S end of that island and Jungle Island. Anchorage can also be taken, in depths of 21.9 to 23.8m, about 1 mile NW of Brush Islet.

**Directions.**—Vessels entering Port Cornwallis should keep Brush Island bearing 287° and in line with South Point, the S end of Chatham Island. When the NE end of the latter island bears 313° and is in line with the SW end of Wharf Island, course should be altered to that bearing. When abeam of Perseverance Point, course can be altered to the N for the anchorage.

The coast, between Dundas Point and Cadell Point, about 15 miles to the S, is not well charted. Craggy Island, which lies about 3 miles S of Dundas Point, is joined to the mainland by a reef. Small vessels with local knowledge can obtain good anchorage off the S side of this reef.

Saddle North Peak and Saddle Hill, both prominent, lie inland along this section of coast. Both have been previously described in [paragraph 9.11](#).

## Stewart Sound

**9.27 Stewart Sound** (12°54'N., 93°00'E.), which contains several bays and inlets within its limits, lies within Sound Island between Cadell Point and Cape Vestal, about 11 miles SSW. The hills surrounding the sound are covered with dense jungle. White Mountain, 361m high and prominent, lies 2 miles WSW of Cape Vestal at the N end of the E coastal range of Middle Andaman Island. Ray Hill, a conspicuous cone-shaped hill 135m high, lies 5.7 miles SW of Cadell Point. The hill serves as a good mark for vessels approaching the S entrance of the sound. Ridges of high land span Sound Island in all directions and are prolonged in spurs up to the entrance points of the numerous bays that indent the island. The conspicuous summit of Sound Island is 147m high and lies 1 mile WSW of Simpson Point.

Stewart Sound is of great extent and contains the principal port of North Andaman Island. Several lumber camps and settlements are found around the shores of the sound.

**Austin Strait** (12°54'N., 92°53'E.), which separates North Andaman Island and Middle Andaman Island, has its E entrance at the head of a shallow bay on the S side of Stewart Sound.

**Tides—Currents.**—The tidal currents set N on the rising tide and S on the falling tide. They attain a spring rate of 1.5 knots in the narrow parts of the sound. The N current attains a rate of 0.3 knot, and the S current a rate of 2 knots, S of Comp Bay, a small bight on the N side of the N entrance. The tidal currents close N of Takla Oyster Point set SW on the rising tide and NE on the falling tide. During the strength of the Southwest Monsoon, the SW current is very weak, but the NE current attains a rate of 2 knots.

**Sound Island** (12°58'N., 92°59'E.) is an irregular-shaped island lying in the entrance of Stewart Sound. Above and below-water rocks extend about 0.5 mile NE from Simpson Point, the NE end of the island. Mitchell Point, the SE extremity of the island, is fringed by a drying reef that extends 0.3 mile SSW from it. Square Rock, 4.3m high and prominent, lies on the W side of the outer part of the reef. A lighted beacon lies on Square Rock.

Jones Point, the SW extremity of Sound Island, is fringed by a drying reef on which there is a ridge of rocks extending 0.4 mile S to SE. A rock, that dries 2.4m, lies near the end of this ridge.

**9.28 North entrance.**—The N entrance of the sound lies between Cadell Point and Simpson Point. Elphin Patch, which lies near the middle of the entrance, has a depth of less than 1.8m near its center. Morland Rock, which dries 2.4m, lies about 0.4 mile SW of Cadell Point. Shoal ground, with a least depth of 4.6m near its outer end, extends about 0.3 mile SSE from the rock.

**Oliver Island** (13°00'N., 93°00'E.), 59m high, lies 1 mile W of Simpson Point. There are considerable depths in the channel between it and Sound Island.

**Sunk Reef** (13°00'N., 92°59'E.), which dries 0.6m and which has a 5.5m patch on its NW side, lies 0.8 mile NW of Oliver Island.

A group of drying rocks lie about 1 mile W of Oliver Island. An area of shoal ground extends about 0.3 mile SW from the group.

**Oyster Island** (12°59'N., 92°59'E.), 1.2m high, lies 0.8 mile WSW of Oliver Island.

**Stewart Island** (13°01'N., 92°56'E.), which lies in a shallow bay on the NW side of the sound, is covered with jungle growth. A drying mudbank joins the NW side of the island with North Andaman Island.

**Marsack Shoals** (12°57'N., 92°57'E.) consist of two small patches that lie close together at the S end of the channel, between Sound Island and North Andaman Island. The E patch has a least depth of 5.9m and the W patch a least depth of 2.7m.

**9.29 South entrance.**—The S entrance of the sound lies between Mitchell Point and Cape Vestal, about 5 miles SSW. Five Fathom Patch, a fairly large shoal with depths of 9.1 to 16.5m, lies about in the middle of the S entrance. Convict Patch, with depths of less than 5.5m, lies 1 mile N of Cape Vestal. Some rocks, with depths of less than 1.8m, lie on the shoal. A 11m shoal lies about 2 miles ENE of the same point.

**Aves Island** (12°55'N., 92°57'E.), 63m high and conspicuous, lies about 2 miles SW of Sound Island. A drying reef connects the island to Aves Point to the WSW.

**Takla Oyster Point** (12°55'N., 92°55'E.), about 1.5 miles WNW of Aves Point, is the N end of a promontory which forms the E side of a shallow bay. The E entrance of Austin Strait lies at the head of this bay.

A shoal, with a least depth of 3.2m, lies almost 0.5 mile E of Takla Oyster Point.

**Berkeley Island Group** (12°56'N., 92°54'E.) consists of Orchid Island, Curlew Island, Egg Island, and Dottrel Island, which lie in the approach to Bacon Bay to the W and NW of Takla Oyster Point. All except Dottrel Island are identifiable from abeam of Square Rock. Several prominent trees, some wooden huts, together with a red-roofed bungalow on its NE side, makes Curlew Island identifiable.

A shoal, having a depth of 12.8m, lies almost 0.3 mile S of the S end of Orchid Island. A rock, which uncovers 2.1m, lies 0.3 mile E of Curlew Island. A shoal, with depths of 7.8 to 14.6m, extends about 0.6 mile NW from the NW end of Orchid Island.

**Bacon Bay** (12°57'N., 92°54'E.) is entered between Brown Point and Orchid Island, about 0.3 mile WSW. The bay is sheltered from all winds and its E part is clear of all dangers up to within 0.2 mile of the shore. A detached 13.2m patch lies about midway between Brown Point and Orchid Point.

**Anchorage.**—Anchorage can be taken in suitable depths in any part of Steward Sound. Anchorage can be taken in Bacon Bay in all seasons.

Anchorage can be taken, in depths of 14.6 to 16.5m, almost 1 mile N of Oliver Island and in the channel between Sound Island and North Andaman Island, about 2 miles N of Jones Point. These anchorages are partially open to the NE.

Vessels calling at Mayabunder Settlement, on the NW side of Takla Oyster Point, can anchor, in a depth of 18.3m, mud, with Egg Island bearing 272°, distant 0.5 mile and the S point of Orchid Island bearing 023°. Ample depths are available for anchoring elsewhere in this vicinity. Small vessels with local

knowledge can anchor farther W of Dottrel Island but caution is advised.

Ample depths are available for anchoring at the head of Bacon Bay, or about 0.4 mile off the E shore.

**Directions.**—Vessels coming from the N and intending to enter by the S entrance, should pass about 0.8 mile off Square Rock and then steer for Orchid Island on a course of 284°.

Vessels proceeding to the anchorage off Mayabunder Settlement should proceed as directed above until Egg Island bears 272°, and then alter course to this bearing which will lead to the anchorage. Egg Island should not be brought to bear more than 272°, until well clear of the 3.2m patch E of Takla Oyster Point.

Vessels proceeding to the anchorage in Bacon Bay should pass about 0.8 mile off Square Rock, keeping Orchid Island bearing 284° until the summit of Aves Island bears 135°. Then a course of 315°, with Aves Island astern, leads into Bacon Bay, passing midway between Orchid Island and Brown Point. This course passes over the patch previously-mentioned 13.2m. When the summit of Ray Hill bears 050°, course can be altered for the anchorage at the head of the bay.

Vessels coming from the S should keep Ray Hill bearing 322° until Orchid Island is seen about midway between Aves Island and Jones Point, bearing 287°. The directions given above can then be followed.

**Mayabunder Settlement** (12°56'N., 92°55'E.) lies on the NW side of Takla Oyster Point.

The local district administrator resides in a conspicuous white house with a red roof on the NE side of the point. Two conspicuous high trees lie about 0.3 mile S of the house and the ruins of a sawmill lie on the NW side of the point.

A short wooden jetty, with a depth of 2.4m alongside its head, extends from the NW side of Takla Oyster Point. In 1985, the jetty was extended 57m NE.

## Middle Andaman Island and Baratang Island—East Coasts

**9.30** The coast between Cape Vestal and Cape Strachan, about 9 miles SSE, is high and clear of off-lying dangers. The latter projection forms the N entrance point of Cuthbert Bay. Mount Diavolo, 512m high, lies about 3.5 miles W of the same point. Between Cuthbert Bay and Coxon Point, about 13 miles to the S, the coast continues to be high.

**Rangat Bay** (12°29'N., 92°58'E.) is entered between Coxon Point and Johns Point, about 0.8 mile to the S. Both points are bold and bluff.

A shoal, with a depth of 7.3m near its outer end, extends about 2.3 miles E from Coxon Point. The inner part of this shoal has several detached heads, with depths which range from 3 to 4.9. A rock, which dries 1.2m, lies among these heads about 0.8 mile ENE of Coxon Point.

A drying reef extends about 0.5 mile SE from Johns Point.

Anchorage can be taken, in depths of 6.4 to 9.1m, midway between the entrance points of Rangat Bay. Local knowledge is required because the depths shoal rapidly within the entrance points.

Between Johns Point and a 117m promontory on Baratang Island, about 17 miles SSW, the coast is bordered by numerous

islands and dangers and indented by many bays. Between the promontory and North Point, the SE end of Bartang Island, about 9 miles SW, the coast is indented by many reef fringed bays and backed inland by hilly terrain. North Point forms the N side of the S entrance of Andaman Strait.

**Long Island** (12°24'N., 92°57'E.) densely wooded and fringed by shoal ground, lies about 2.5 miles SSW of Johns Point. Its W coast is joined to Middle Andaman Island by a shallow flat.

Long Island is the N of a chain of islands, reefs, and other dangers which extend S for about 15 miles from a position about 2.5 miles S of Johns Point. The islands are separated from each other, and from Middle Andaman and Baratang Islands, by fairly narrow, shoal channels. Small vessels with local knowledge can find shelter in some of these bays. Elphinstone Harbor, which provides sheltered anchorage, lies close to the E entrance of Homfray Strait, which separates Middle Andaman Island and Bartang Island.

**Guitar Island** (12°21'N., 92°55'E.) lies about 0.8 mile SSW of Long Island and is joined to Middle Andaman Island by a shallow flat. Cape Dalrymple forms the S end of an islet, 75m high, which lies close S of Guitar Island. Round Island lies about 183m W of the SW end of Guitar Island.

A shoal, with a least depth of 2.7m, lies about 0.8 mile SSE of Cape Dalrymple. A detached patch, with a least depth of 7.6m, lies about 1 mile SSE of the same cape.

**Nancowry Ledge** (12°20'N., 92°56'E.), which has depths of less than 1.8m, lies about 1.3 miles E of Cape Dalrymple.

**9.31 Anderson Rock** (12°26'N., 92°59'E.), which dries 0.3m, lies 1 mile E of the N end of Long Island.

**Campbell Shoal** (12°25'N., 93°04'E.) lies about 6 miles ESE of the N end of Long Island and has a least depth of 5.5m, rock. It lies on the E side of an irregular bank about 2.8 miles long and 1.3 miles wide, which has depths which range 16.5 to 36.6m.

**Headlam Patch** (12°24'N., 92°59'E.), with a least depth of 3.7m, lies about 2.5 miles SSE of the N end of Long Island. Depths of 5.5 to 16.5m surround this danger.

An extensive shoal, with a depth of 4.6m near its SW end and a depth of 8.2m near its NE end, lies between 5.3 and 7.8 miles E of Cape Smith, the S end of Long Island. A detached shoal, about 1 mile in extend, lies with its shallowest depth of 3.7m, about 6.3 miles ESE of Cape Smith.

**Ostmaston Shoal** (12°21'N., 92°58'E.), with a least depth of 3m, lies about 1.8 miles E of Cape Smith.

**North Passage Island** (12°16'N., 92°56'E.), irregular in shape, high, and wooded, lies 3 miles S of Long Island. Cape Portman is the NE extremity of the island. The E side of the island is fronted by dangerous foul ground which extends up to 2 miles offshore. Balfour Reef extends about 1 mile N from the NW end of the island. Merk Bay, which lies between Balfour Reef and the promontory to the E, has depths of 18.3 to 27.4m.

**Strait Island** (12°13'N., 92°56'E.) lies about 0.8 mile SSE of North Passage Island. The intervening passage between the two is foul. The N and E sides of Strait Island are fringed by reefs. Shoals and foul ground, with depths of less than 1.6m, extend up to 1.3 miles E of the island. Shoals, with depths of 3 to 4.9m, extend about 0.5 mile SSW from Cross Point, the S

end of the island. A 8.7m shoal lies 2.5 miles ENE of the same point.

A light is shown on the W side and at the S end of Strait Island, close N of Cross Point.

**Colebrooke Island** (12°14'N., 92°54'E.), of irregular shape and densely wooded, lies close W of the SW part of North Passage Island.

Tidal currents in the channel between Long Island and Guitar Island, in the approach to Elphinstone Harbor, and at the various anchorages are weak. They become somewhat stronger, however, after consistent E winds. Strong tidal currents and eddies are experienced in Homfray Strait.

A channel, with depths of 6.4 to 36.6m, leads between Long Island and Guitar Island to the jetties on the SW side of the former island. A narrow channel, with depths of 6.4 to 12.8m, leads NNW to the entrance of several shallow creeks that lead into the interior of Middle Andaman Island.

**9.32 Homfray Strait** (12°15'N., 92°52'E.), an intricate, rocky channel connecting Elphinstone Harbor with Port Anson, separates Middle Andaman Island from Baratang Islands. Depths in the fairway are not less than 5m, except near the E entrance where the depths over the bar is very shallow.

The channel between North Passage Island and Strait Island is shallow and foul.

The channel between North Passage Island and Colebrooke Island is about 0.5 mile wide and has depths of 5.5 to 18.3m. Small vessels with local knowledge can use this passage which is obstructed in places by reefs and shoals.

**Colebrooke Passage** (12°13'N., 92°53'E.) is 0.2 mile wide with depths of 7.3 to 18.3m. Its N part is shallow.

**Anchorage.**—Vessels can anchor about 0.3 mile SW of the previously-mentioned jetty, in a depth of 8.2m, but the swinging room is restricted.

Anchorage can be taken, in a depth of 23.8m, good holding ground, about 10.3 miles W of Cross Point.

A sheltered anchorage with good holding ground can be taken, in a depth of 15.5m, near the S end of Colebrooke Passage, with Cape Union in line bearing 065° with the center of Middle Button Island.

**Caution.**—A depth of 3.2m lies a little over 1 mile W of Cape Union; a 5m patch lies about 0.8 mile SW of the same cape.

Anchorage can be taken in **Rogolochang Bay** (12°09'N., 92°50'E.), in depths of 7.3 to 9.1m, about 4 miles SSW of the S entrance of Colebrooke Passage.

A lumber camp, with a sawmill and a small woodshop, lies on the SW side of Long Island about 0.8 mile WNW of Cape Smith. A wooden jetty, with reported depths of 2.4 to 3m alongside, extends from the shore about 0.4 mile N of the camp. A trolley connects the two.

**Elphinstone Harbor** (12°18'N., 92°54'E.), which is formed by the N part of the channel which separates North Passage Island from the E side of Baratang Island, is entered between Cape Dalrymple and Cape Portman, about 1.8 miles SE. The 118m hill, which lies on the N entrance point of Homfray Strait about 2 miles WSW of Cape Dalrymple, is a useful mark. A prominent tree lies on Guitar Island. Depths in the entrance range from 7.9 to 25.6m, decreasing gradually to depths of 6.1

to 18.3m within the harbor. Numerous shoals and reefs obstruct the inner harbor, the positions of which can best be seen on the chart.

**Mills Passage** (12°15'N., 92°55'E.), between the S part of North Passage Island and Colebrooke Island, has a least width of 0.5 mile and depths of 5.5 to 18.3m. Numerous shoals and reefs obstruct the passage which can only be used by small craft with local knowledge.

Anchorage can be taken, in a depth of 18.3m, good holding ground, about 0.3 mile off the coast of North Passage Island, with the NW point of that island bearing 029°, distant 0.5 mile.

**Diligent Strait** (12°10'N., 92°57'E.) lies between North Button Island, Middle Button Island, and the Strait Islands to the NW, and Outram Island, South Button Island, and the Wilson Islands to the SE.

Depths in the fairway of the strait range from 8.5 to 53m. The shallowest depth of 8.5 lies about 1.8 miles E of the S end of Strait Island and a 9.8m patch lies about 0.5 mile farther E.

**9.33 North Button Island** (12°19'N., 93°05'E.), 48m high and reef-fringed, lies 7.5 miles E of the NE end of North Passage Island. Low, irregular cliffs lie at its E end. The W end of the island descends abruptly to a tree-covered sand spit. Shoals, as defined by the 10m curve, extend about 1 mile E and 0.3 mile W from the island. The N side is clear of dangers, but the bottom is rocky. The E and W ends of the island should be given a wide berth when passing. A light is shown on the NW side of North Button Island.

Anchorage can be taken by small vessels with local knowledge close off the reef on the S side of the island.

**Middle Button Island** (12°17'N., 93°02'E.), 50m high, lies about 3 miles SW of North Button Island. The N end is cliffy, but the SW point terminates in a short sandspit with a few low rocks off it. Shoals, with depths of 8.2m, extend about 1.5 miles NNE from the N end of the island. A rocky ridge and shoal ground extends about the same distance SW from the island. A light is shown on the NE side of Middle Button Island.

Small vessels with local knowledge can anchor S of Middle Button Island clear of the shoals.

Outram Island, 3.5 miles S of North Button Island, will be described under the Ritchies Archipelago in paragraph 9.34.

**South Button Island** (12°13'N., 93°02'E.), about 3 miles S of Middle Button Island, is 36m high and formed of large rocks, steep-to on all sides. A rocky head, with a depth of 10.1m, lies about 1 mile E and coral patch, with a depth of 3.2m, lies about 1 mile SE of the island. A light is shown from South Button Island.

**Two Fathoms Rock** (12°10'N., 92°58'E.) lies about 4.8 miles SW of South Button Island.

**Directions.**—Vessels approaching from the N should shape course, from a position about 2 miles E of North Button Island, to pass about 0.5 mile NW of South Button Island. When that island bears about 135°, course should be altered to the S until the S side of the island is in line bearing 055° with the NW extremity of Outram Island. This range should be kept on that bearing astern until the N point of Nicholson Island is seen open W of the W end of Wilson Island, bearing about 192°. Course can then be altered to pass about 1.5 miles W of the latter island.

Vessels approaching from the S side should steer for Strait Island until the S side of South Button Island is in line bearing 055° with the NW extremity of Outram Island. This range should be steered until the E end of Middle Button Island bears 022°. Course should then be altered to pass NW of South Button Island and midway between Middle and North Button Islands and Outram Island.

## The Ritchies Archipelago

**9.34 The Ritchies Archipelago** (12°03'N., 93°02'E.) consists of ten islands lying between the parallels of 12°16'N. and 11°47'N, with the N end of the group being separated from Baratang Island by Diligence Strait. All of the islands are heavily wooded.

**Outram Island** (12°15'N., 93°06'E.), the N island of the group, is reef-fringed on all except its W side and contains Outram Harbor in a deep indentation along its N coast. Some low rocks lie on the reefs which fringe West Point, the W entrance point of the harbor. Shoal ground extends 0.8 mile NE from this point, and 0.6 mile NNE from East Point, the E entrance point of the harbor.

**Outram Harbor** (12°15'N., 93°06'E.) provides good shelter from S winds. Small vessels with local knowledge can anchor, in a depth of 18.3m, near the middle of the harbor, with the N end of Middle Button Island in line bearing 290° with West Point.

Charka Juru, the strait separating Outram Island from Henry Lawrence Island to the S, has considerable depths throughout its length. Shoal ground extends about 0.8 mile S from South Point, the S end of Outram Island. Once this shoal has been cleared, a mid-channel course will lead through the strait.

The W side of Henry Lawrence Island rises steeply to a ridge about 137m high. A narrow reef fringes the island.

**Kwangtung Strait** (12°06'N., 93°04'E.), the channel between Henry Lawrence Island and John Lawrence Island, has considerable depths in the fairway. The drying reefs which fringe both shores are usually visible.

Rocky Heads lie about 0.5 mile N of Briton Point, the N end of John Lawrence Island. Shoals and foul ground extend 1.5 miles NW from the NW coast of the island.

**Wilson Island** (12°08'N., 92°59'E.) lies W of the N part of John Lawrence Island and is separated from it by a narrow channel. Round Hill, which rises about 1 mile within the NW point of Wilson Island, is 216m high. Foul ground, marked by numerous coral heads, extends from the NW point of Wilson Island to Briton Point on John Lawrence Island.

**Nicholson Island** (12°06'N., 92°58'E.), separated from Wilson Island by a channel about 1 mile wide, rises to a height of 97m in its N part. The W side of the island is fringed by prominent steep-to white reefs. A reef extends about 0.3 mile S from the S end of the island. A shoal, with a depth of 3.2m, lies close S of this reef.

**Sir William Peel Island** (12°05'N., 93°00'E.), low and bordered by dense mangroves, lies 0.5 mile E of Nicholson Island. The intervening channel is available only to small craft with local knowledge. The channel between this island and Wilson Island to the N is narrow and foul.

Havelock Island is the largest of the Ritchies Archipelago. There is an L-shaped jetty, with a dolphin close SE of its head,



situated at Jetty Point, the NE extremity of the island; there is a depth of 5.2m at its head.

**9.35 Tadmā Juru** (12°03'N., 92°59'E.), narrow and deep, separates Sir William Peel Island from Havelock Island to the S. Both sides of the channel are fringed by shoals which extends up to 0.2 mile offshore in places. A detached patch lies on the S side of the channel, about 0.5 mile E of Stowe Point the N end of Havelock Island. Stowe Point is marked by a beacon. Yulutang, a conspicuous hill 167m high, lies 2.8 miles SE of the point.

**Rosamund Shoal** (12°04'N., 92°58'E.), a narrow coral ledge almost awash, lies about 0.5 mile N of the N end of Havelock Island. The ledge is difficult to make out.

**Directions.**—Vessels approaching Tadmā Juru from the W, should pass S of Rosamund Shoal on a 090° course. When about 0.2 mile from the SW coast of Sir William Peel Island, course should be altered to 123°, maintaining a mid-channel course. When close to the E entrance of the strait, course should be altered to 073° toward the reef fringing the SW coast of John Lawrence Island. This steep-to reef is usually visible. When close to the edge of this reef, course should be altered to 147°, which leads along the W edge of the reef and then E of Pilot Reef, which lies 1 mile S of the S end of John Lawrence Island.

Between Stowe Point and Doone Point, about 3.8 miles SW, the W coast of Havelock Island is slightly indented by an open reef-fringed bight. Anchorage can be taken off Jalebao, about 2.3 miles SSW of Stowe Point.

Between Doone Point and the S end of Havelock Island, about 9.8 miles SE, the coastal reef extends up to 0.5 mile offshore. Havelock, 1.3 miles SE of Doone Point, is a conspicuous hill, 164m high, at the W end of a bay. White cliffs, about 27m high, line the S end of the island. Sail Rock, 6.1m high, lies close off the S end of the island and appears as a sail on some bearings.

The N side of Outram Island and Charka Juru, the channel separating it from Henry Lawrence Island, have been previously described in [paragraph 9.34](#).

The E coast of Outram Island is fringed by a reef which extends up to 0.3 mile offshore. As previously stated, coral heads and foul ground extend about 0.8 mile S from the S end of Outram Island.

The E coast of Henry Lawrence Island is low, irregular, and bordered by dense mangroves. Reefs extend up to 1 mile offshore in places. A densely wooded islet lies on this reef about 4 miles S of the S end of Outram Island.

**9.36 Inglis Island** (12°08'N., 93°07'E.) lies about 0.8 mile E of the wooded islet and is fringed by a drying reef on all except its NW side. This reef extends up to 0.5 mile off the NE coast, where it terminates in two rocks, each about 1.2m high. Small portions of the N and S points of the island have been detached by the action of the sea and appear as islets at high tide.

**Inglis Shoals** (12°06'N., 93°08'E.), two detached coral patches with depths of 6.9m and 8.7m, lie about 0.8 mile S and 1.8 miles SSE of the S end of Inglis Island.

During NE winds, sheltered anchorage can be taken, in a depth of 12.8m, off a sandy bay, close NW of Wreck Point, the S extremity of Henry Lawrence Island.

**Tadmā Bay** (12°03'N., 93°02'E.) lies W of Runnymede Point, the S end of John Lawrence Island, and between it and Sir William Peel Island. It forms the S entrance of Paranga Juru, a narrow channel separating the two islands. It also forms the E entrance of Tadmā Juru, which has been previously described in [paragraph 9.35](#).

**Pilot Reef** (12°01'N., 93°02'E.), about 1 mile S of Runnymede Point, has a least depth of 2.7m. A narrow coral reef, as defined by the 10m curve, extends about 1 mile S from Pilot Reef.

Havelock Island, S of Sir William Peel Island, is reef-fringed. Foul ground extends up to 1.3 miles E from its NE coast to within a short distance of the ridge which extends S from Pilot Reef.

**Anchorage.**—Anchorage can be taken in Tadmā Bay, sheltered from all except S winds.

**Directions.**—Vessels approaching Tadmā Bay from the S and E can clear Pilot Reef and the foul ground E of Havelock Island by bringing the W extremity of Sir Hugh Rose Island bearing 173°, and just open E of the E extremity of Neill Island. When the extremity of the reef extending S from Runnymede Point is seen, course can be shaped to the NW into Tadmā Bay.

**9.37 Minerva Ledge** (12°04'N., 93°09'E.), a detached rocky ledge with a least depth of 6.9m, lies about 4.5 miles ESE of Wreck Point. It lies near the outer edge of a bank, as defined by the 40m curve, that extends about 5 miles E from the S end of Henry Lawrence Island.

**Vibart Shoal** (11°59'N., 93°08'E.), narrow and steep-to on its E side, lies centered about 6.3 miles SE of Runnymede Point. Depths over this shoal range from 16.4 to 18.3m.

**Nancowry Strait** (11°52'N., 93°03'E.), between Havelock Island and Neill Island to the S, has depths of 18.2m in the fairway. A small coral patch, with a least depth of 12.8m, lies in the W part of the strait about 0.8 mile N of the NW end of Neill Island. Vessels should pass N of this danger.

**Neill Island** (11°50'N., 93°03'E.) rises to a height of 101m at Nipple Hill, the conspicuous NE end of the island. White cliffs border the seaward face of this end of the island. A rock, 10m high, lies about 91m off this point. Some detached patches, with depths of less than 5.5m, lie off the N coast. Neill Island Pier projects NE between drying reefs on the N side of the island and is marked at its root by a flagstaff. Murugan Temple, 13m high and conspicuous, lies 0.1 mile SW of the pier. A reef extends up to 0.5 mile off the S end of the island and is usually marked by heavily breaking seas. The S point of the W coast of Neill Island is formed by dark cliffs about 12.2m high.

**Sir Hugh Rose Island** (11°47'N., 93°05'E.), the S island of the Ritches Archipelago group, lies about 2 miles SE of Neill Island and is densely wooded. The NW side of the island rises to a height of 73m. Some prominent yellow cliffs, about 24m high, border the NE point of the island.

The island has been reported to be a good radar target up to 14 miles.

Several patches, with depths of 5.5 to 11.9m, lie in the channel between Neill and Sir Hugh Rose Islands. Vessels are advised not to use this channel because the bottom is very uneven.

Deep-draft vessels passing SW of Sir Hugh Rose Island should avoid a bank with depths of 16.5 to 18.3m, which lies between 1.5 and 2.5 miles SW of the island.

**9.38 Andaman Strait** (12°04'N., 92°47'E.), referring to the E entrance of that strait, lies between North Point, a 76m promontory forming the SE extremity of Baratang Island, and South Point, the NE extremity of South Andaman Island, about 2 miles SSW. From the 76m promontory the coast extends about 1.8 miles WSW to Entrance Hill, the N point of the inner entrance of the strait. This 30m high conical hill is conspicuous.

Andaman Strait Light is shown from the summit on North Point.

The general width of the strait ranges from 0.2 to 0.3 mile, but narrows to a width of 73m in places.

The strait has moderate depths, except for two ridges which span the strait, and over which the least depth is 5.5m. A bar, over which there are depths of 3.3 to 3.9m, obstructs the entrance from a position about 0.5 mile NE of Entrance Hill and South Point. The navigable width of the bar is about 183m. A vessel with a draft of 4m has passed through the strait. The bottom throughout is of mud and sand.

A small isolated, rocky ledge topped by a 4m high prominent rock on it, lies about 0.5 mile SE of the 76m promontory. A detached shoal, with a least depth of 2.7m, lies about 0.5 mile S of the promontory.

A coral reef, which dries in places, extends up to 0.5 mile offshore between North Point and Entrance Hill.

A ledge of drying coral extends almost 0.5 mile NE from South Point. The coast between this point, and the S point of the inner entrance of the strait about 1.5 miles W, is bordered by foul ground which extends up to 0.3 mile offshore.

**Oral Kaicha** (12°11'N., 92°46'E.), a small island which lies about midway between the E and W entrance of the strait, can be passed on either side but the E side is preferred.

Anchorage can be taken, in depths of 16.5 to 18.3m, mud, about 1.3 miles NNE of South Point.

The coast between South Point and Wedge Point, about 1.5 miles to the S, is fringed by a drying reef that extends almost 0.3 mile offshore.

**Smythe Rock** (12°03'N., 92°48'E.), the outermost danger off this section of coast, lies about 1 mile E of South Point and has a least depth of 3.2m.

Whitehouse Rock, which has a least depth of 3.7m, lies 1 mile E of Wedge Point. A shoal, with a least depth of 1.2m, lies midway between this rock and the point.

A rock, barely above water, lies 0.5 mile SE of South Point. Rocks, which dry up to 1.2m, lie about 0.4 mile N and 0.3 mile NNE of Wedge Point.

Wedge Rock, 8.5m high and prominent, lies close S of Wedge Point.

**Port Meadows** (12°01'N., 92°46'E.) is entered between Wedge Point and Cape Persain, a little over 1 mile SW. The shores of the port are reef fringed and the low land is covered with mangroves. Cape Persain is the NE extremity of a fairly

high hill which lies on a promontory separated from the coast by mangroves.

**9.39 Duncan Island** (12°01'N., 92°47'E.), 90m high and densely wooded, is connected to the shore W of Wedge Point by a drying shoal.

The entrance channel, which lies between Duncan Island and Cape Persain has a least depth of 20.1m.

The E and S sides of Duncan Island are fringed by above-water and sunken rocks which extend up to 183m offshore. A prominent 5.5m high rock lies close off the SW side of the island. A drying rock lies 137m SW of this rock.

The E side of the promontory forming Cape Persain is fronted by a drying reef that extends about 0.4 mile offshore. This reef only extends about 183m offshore, E and N of Cape Persain. Some drying rocks lie on the reef.

A detached 4.5m patch lies about 0.2 mile E of Cape Persain.

A two-pronged pinnacle rock, with a least depth of 5m, lies on the S side of the approach to Port Meadows about 0.7 mile SE of the summit of Duncan Island. A dangerous wreck, marked by a buoy, lies on this rock.

The Patch, a shoal with a least depth of 7.3m, lies about 0.8 mile ESE of Cape Persain.

**Anchorage.**—Anchorage can be taken, in depths of 16.5 to 18.3m, about 0.2 mile W of the W point of Duncan Island. Anchorage can also be taken, in a depth of 14.6m, in the center of the SW part of the harbor, about 0.6 mile W of Cape Persain.

**Directions.**—Vessels should keep Cape Persain bearing 276° until the E end of Duncan Island is in line bearing 012° with Wedge Point. A course of about 292° then leads in mid-channel through the entrance. When Wedge Rock becomes visible, course can be altered to 000° for the E anchorage, or to 260° for the previously-mentioned W anchorage.

A jetty extends from the W side of the promontory, about 0.3 mile W of Cape Persain. A lumber camp lies near the inner end of the jetty.

The coast between Cape Persian and Point Crawley, about 0.8 mile S, and then to Kotara Point, about 1.5 miles farther SW, is fringed by a drying reef which extends about 0.5 mile offshore. Some drying rocks lie on this reef.

**Kotara Anchorage** (11°59'N., 92°45'E.) lies between Kotara Point and the N side of Kyd Island, about 0.8 mile to the S. This island is 237m high and rounded.

A least depth of 6.4m exists in the fairway, with depths of 8.2 to 14.6m being found in the entrance.

Anchorage can be taken, in depths of 6.4 to 7.3m, mud, about 0.5 mile SW of Kotara Point. Small vessels with local knowledge can anchor, in depths of 7.3 to 8.2m, mud, in the outer part of an inlet about 1.5 miles W of Kotara Point.

**Shoal Bay** (11°56'N., 92°47'E.) entered between the SE side of Kyd Island and Cape Masy, about 1.5 miles to the SE, is shoal over most of its area.

Depths of 6.4m are found in the narrow entrance channel decreasing to a depth of 5.5m about 1.5 miles within the entrance and to a depth of 1.8m at the entrance of Shoal Bay Creek.

The coast between Cape Masy and North Point, about 14.5 miles to the S, is bold and free from dangers. The land rises to form a broken ridge which parallels the coast at a distance of

about 2 miles. Koyob, a peak which rises to a height of 459m, lies 6.8 miles N of North Point.

## **Port Blair (11°41'N., 92°45'E.)**

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**9.40** Port Blair is entered between North Point and South Point, about 2.3 miles to the S. The port consists of an inlet 4 miles long which is entered through two channels, one on each side of Ross Island. The port is divided into an exposed outer harbor and a landlocked inner harbor. The port is the headquarters of the Chief Commissioner, who is representative of the Indian Government for the Andaman Islands and the Nicobar Islands. The principal administrative offices lie at the village of Aberdeen on the S side of the harbor about 1 mile WNW of South Point. The port officer also resides at Aberdeen. Port Blair is the site of an Indian Naval Base, but has little commercial importance.

Port Blair Port Control may be contacted on VHF channels 10, 12, and 16 for port instructions.

**Winds—Weather.**—Port Blair has a mean temperature of 28°C.

**Tides—Currents.**—The currents in Port Blair are weak and are affected by the prevailing winds. The rates rarely exceed 1 knot. During the Northeast Monsoon, the current sets S and during the Southwest Monsoon it sets between N and E. Heavy seas and swells occur in the outer harbor during the Northeast Monsoon. The inner harbor is sheltered and experiences no sea or swell. The mean range of the tide is 1.4m and the spring range is 2m.

**Depths—Limitations.**—Considerable depths exist in the N entrance channel between North Point and Ross Island. A 5.2m shoal lies in this channel about 0.4 mile ESE of Atalanta Point.

Depths of over 18.3m exist in the outer harbor and depths of 5.5 to 27.4m exist in the inner harbor.

Depths at the anchorages range from 12.8 to 16.5m. Depths alongside the berths range from 2.1 to 5.8m. An examination anchorage area is shown on the chart.

**Pilotage.**—Pilotage is compulsory for vessels over 200 grt. The pilot boards 0.8 mile N of Ross Island.

**Regulations.**—Vessels should send an ETA message 48 hours and 24 hours in advance to the Deputy Conservator of Ports in advance, stating:

1. Vessel name.
2. Port of departure.
3. Destination.
4. ETA.
5. Length, beam, maximum draft, and grt.
6. Speed.
7. Number of people on board suffering from dangerous or contagious diseases, if any.
8. Type and quantity of cargo.
9. Agent's name and requirements, if any.

**Signals.**—Storm signals are displayed at the light station on Ross Island; the [Indian General System](#) is used.

**Caution.**—A submarine exercise area is located 35 miles SSE of Port Blair. A good lookout should be exercised in this vicinity.

**9.41 Ross Island** (11°41'N., 92°46'E.) divides the entrance of Port Blair into a N channel and a S channel. The island is roughly triangular in shape and lies about 0.4 mile NE of South Point. The former residence of the Chief Commissioner lies at an elevation of 45m on the highest part of the island about 1.5 miles SSE of North Point. A dark stone building with battlements, about 17m high, lies on the N end of the island.

A reef fringes the island on all except a small part of its W side. A shoal as defined by the 6m curve, extends about 0.3 mile NW from the NW end of the island.

Storm signals are displayed from the lighthouse on the NE corner of the above-mentioned dark stone building.

The following objects on the S side of the outer part of the harbor are conspicuous:

1. The mast and tower on Atalanta Point.
2. A temple 0.8 mile S of Atalanta Point.
3. Mount Houghton, 155m high, about 1.5 miles S of Atalanta Point.
4. Flagstaff Hill Tree, with an elevation of 122m, a little over 1 mile SSW of Atalanta Point

**9.42 North shore—Port Blair.—North Point** (11°42'N., 92°46'E.) is bordered by shoal ground, as defined by the 10m curve, which extends almost 0.3 mile S from it.

North Bay, entered between North Point and Perseverance Point, almost 1 mile SW, extends about 1 mile inland and is bordered on its W and N side by foul ground. Mount Harriet, about 1.8 miles NW of North Point rises steeply to a height of 364m. Some buildings lie close to its summit.

**Semiramis Bay** (11°42'N., 92°44'E.), small and deep, is entered between Lime Kilns Point and Command Point, almost 1 mile WNW. A pier extends from the head of the bay. Command Point is 4m high; a light is shown from a white concrete tower, 6m high, on the point. A beacon lies 91m N of the light.

Command Bay lies on the W side of Command Point. The settlement of Hope Town lies at the head of the bay.

In 1982, it was reported that plans were made to construct a 180m long wharf at Hope Town to accommodate vessels up to 15,000 grt drawing 9m.

Shore Point, the W entrance point of Bamboo Flat Bay, lies about 1 mile W of Command Point. Some buildings lie at the head of the bay. A small jetty extends from the shore in the NW corner of the bay. The W shore of the bay is fringed by shoal ground which extends about 0.3 mile offshore.

**9.43 South shore—Port Blair.—Sesostris Bay** (11°40'N., 92°46'E.) is entered between South Point and Atalanta Point, about 0.8 mile NW. The bay is almost completely fouled by reefs and shoals. A 3.7m patch lies on a line joining the entrance points, about 0.3 mile SSE of Atalanta Point.

**Sesostris Shoal** (11°39'N., 92°01'E.), which consists of two coral patches with depths of 2.4m, lies about 1 mile S of the S end of Ross Island. A 5.7m patch lies close NE of the E end and a 8.5m patch lies close S of the W end of Sesostris Shoal.

**Atalanta Point** (11°40'N., 92°45'E.) is located 0.8 mile W of Ross Island; the point is fringed by a reef extending 137m offshore.

**Phoenix Bay** (11°40'N., 92°45'E.) is entered between Phoenix Point, about 0.8 mile W of Atalanta Point, and an unnamed point about 0.4 mile to the W. Blair Reef, marked by

some drying rocks, extends about 0.4 mile ENE from the latter point. A 5.2m patch lies about 183m ESE of the outer extremity of Blair Reef. A conspicuous building lies on the W shore of Phoenix Bay. There are numerous wrecks in the S part of the bay.

Cholanga Jetty lies close S of Phoenix Point, with its W face 64.9m in length and having alongside depths between 3.5 and 6.1m. Fishery Jetty extends N for 0.2 mile from the S shore of Phoenix Bay with varying depths from 1m at the inner end to 8m at the head. In 1980, works were in progress for new facilities in the SE corner of the bay.

**Blair Point** (11°41'N., 92°44'E.), about 0.4 mile WNW of the W entrance point of Phoenix Bay, is fringed by a reef which extends about 0.1 mile offshore. A prominent 78m hill lies S of the point. A lighted beacon stands 0.2 mile E of the group of islets close E of the drying extremity of Blair Reef.

**Chatham Island** (11°41'N., 92°44'E.), about 0.3 mile N of Blair Point, is connected to it by a conspicuous causeway. Some buildings and a conspicuous chimney lie on the island.

Chatham Jetty lies along the N side of the island, 249m long with varying depths between 4.8m to 7.4m alongside. Wooden Jetty is situated at the SW side of the island with depths of 1.2 to 6m alongside.

**9.44 Inner port—Port Blair.**—From Chatham Island, the coast extends SW to Hood Point, and then S to Navy Point forming the E side of the inner harbor.

A conspicuous radio mast and a house lie about 0.7 mile E of Navy Point. Navy Bay lies between Navy Point and Lewis Point almost 1 mile SSW.

**Mangrove Bay** (11°41'N., 92°43'E.), which is entered between Shore Point and Dundas Point, lies directly opposite Hood Point. This shoal bay dries in its inner part. A conspicuous white tree lies on the W side of the bay, about 0.8 mile W of Shore Point.

**Ranger Flat** (11°41'N., 92°43'E.), having depths of less than 5.5m, extends about 0.5 mile SSE and 0.5 mile E from Shore Point. A 4.3m rocky patch lies almost 0.5 mile S of Shore Point. Black conical buoys are moored 0.5 mile E, 0.4 mile SE, and 0.5 mile SSW of Shore Point and mark the SE side of the flat. The N end of Chatham Island, bearing 087° and in line with Perseverence Point, leads S of Ranger Flat and N of the 3.7m rocky patch.

The head of the bay S and SW of Dundas Point is shoal and obstructed by drying flats.

**Depths—Limitations.**—There is about 348m of berthing space available, with varying depths alongside. Jetties extend from the N and SW sides of Chatham Island. The N jetty has a length of about 85m, with depths of 6.1 to 7.3m alongside. The wharf at Haddo, about 0.3 mile NE of Hood Point, has a length of 182m with depths of 8.2 to 9.4m alongside.

A tanker submarine pipeline discharge berth, marked at its outer end by a mooring buoy and a float, lies about 0.3 mile NW of Hood Point.

The E coast of South Andaman, between South Point and Chiriyā Tapu, about 11.5 miles SSW, is bold and deep, with the 185m curve lying about 2.5 miles offshore. Sesostris Shoal, the only coastal danger, has been previously described in [paragraph 9.43](#).

**Anchorage.**—Sheltered anchorage can be taken, in depths of 11 to 12.8m, mud, about 0.5 mile WSW of Chatham Island, with the NW extremity of that island bearing 068°.

Small vessels can anchor W of Ross Island, in depths of 14.6 to 16.5m, sand, between 0.1 and 0.2 mile SW of the NW end of Ross Island. This is a fair weather anchorage.

Two black mooring buoys are positioned off the N side of Chatham Island.

Anchorage is prohibited in the vicinity of submarine cables which extend from Ross Island to the mainland and between Hood Point and Dundas Point.

**Directions.**—Vessels entering Port Blair by way of the N channel should pass about 0.5 mile N of Ross Island, and then about 0.3 mile S of Perseverence Point. Shore Point, bearing less than 293° and open the E end of Chatham Island, leads N of Blair Reef. A mid-channel course between Chatham Island and Command Point should then be steered. The NW end of Chatham Island should be rounded at a distance of about 183m and course altered to 237° which leads to the anchorage.

Vessels from S using the S entrance channel should keep Atlantic Point bearing about 313°, in line with the light on Command Point, which leads close SW of the 5.2m patch in the fairway, about 0.4 mile SE of Atalanta Point. The rear beacon should not be confused with the beacon situated on the extremity of Command Point. When South Point bears 163°, the course can be altered N to keep the point astern on that bearing. When the N extremity of Ross Island bears 090°, the course can be altered NW to pass midway between Blair Reef and Perseverence Point, and then as directed above.

Vessels bound for the anchorage W of Ross Island should approach the S entrance channel as directed above. When South Point bears 185°, the course should be altered N and the point kept on that bearing astern, which leads to the anchorage.

**Chiriyā Tapu** (11°29'N., 92°43'E.), the S end of South Andaman Island and the NE entrance point of Macpherson Strait, is a prominent bare promontory with some caves at its base. A rock, 0.3m high, lies about 0.5 mile W of the point; vessels should not pass between this rock and the point.

**9.45 East coast of Rutland Island.— Portman Bay** (11°25'N., 92°41'E.), which is open to heavy swells during the Northeast Monsoon, indents the E coast of the island. The head of the bay is shallow.

Rocks, both above and below-water, extend some distance off the S coast of Rutland Island. This coast should be given a berth of 1.5 miles when passing.

Investigator Rock, which lies off the W end of the S coast of Rutland Island, has been previously described in [paragraph 9.22](#).

## Islands, Dangers, and Passages between Rutland Island and Little Andaman Island

**9.46 Manners Strait** (11°20'N., 92°42'E.) lies between the SE coast of Rutland Island and the Cinque Islands, about 3 miles SE. A detached shoal, with a least depth of 16.5m, lies about 4.8 miles W of the N end of North Cinque Island.

A large shoal area, with depths of 11 to 18.3m, lies with its shallowest part about 12.5 miles WSW of the N end of North Cinque Island.



Depths in the strait, seaward of the fringing dangers, range from 22 to 75m.

A shoal with a depth of 5.5m, the existence of which is doubtful, has been reported to lie 6 miles SSW from Rutland Light on the S of the island.

**Cinque Islands** (11°17'N., 92°43'E.) are two hilly islands which are almost joined by a rocky ledge that dries 2.1m. Two summits, 154 and 145m high, form a saddle near the N end of North Cinque Island. A small, conical, bare hill, 89m high, lies near the S end of the island. A promontory projects WNW from this hill.

North Clique Island Light is shown from its N summit.

South Cinque Island, 166m high, has a 117m high conical hill near its S end.

Anchorage can be taken, in depths of 12.8 to 18.3m, coral and sand, W of the drying ledge which almost joins the two islands, with the W point of North Cinque Island bearing 349°. Small vessels can anchor off the W side of the South Cinque Island, in a depth of 23.8m, with the conical hill at its S end bearing 168°, distant 1 mile.

**Passage Island** (11°11'N., 92°41'E.), 85m high at its N end but low at its S end, lies 3.3 miles SSW of South Cinque Island. A detached rock, 1.8m high, lies about 0.3 mile N of Passage Island. A shoal, with a least depth of 11m, lies 2 miles WSW of the end of Passage Island. During spring tides, overfalls form over this shoal. Small patches, with depths of 14.6 to 18.3m, lie S and NE of this shoal.

The channel between South Cinque Island and Passage Island is deep and clear, although tide rips occur during spring tides.

**The Sisters** (11°09'N., 92°44'E.), two small islets, lie close together about 3.5 miles SE of Passage Island. A ledge connects the islets and a partly drying spit extends about 0.8 mile NW from this ledge. East Sister Island is 76m high and West Sister Island is 70.7m high.

**Duncan Passage** (11°04'N., 92°40'E.) lies between The Sisters and North Brother Island, about 10 miles SSW, and is the main channel between Little Andaman Island and Rutland Island. Depths in the fairway range from 21.9 to 36.6m.

Shoal ground, with depths of 5 to 18.3m, lies between 2 miles WNW and 3 miles NE of the N end of North Brother Island. A 12.3m patch lies about 1.5 miles E of the island.

Patches, having depths of less than 18.3m, lie between 3.3 and 6.5 miles WNW, through 7.3 miles NNW of the N point of North Brother Island.

**9.47 The Brothers** (10°59'N., 92°40'E.), two small flat-topped islands, each 27m high, lie 10 and 14.5 miles SSW of The Sisters. Each island is marked by trees and has a lagoon in the middle part. North Brother Island is fringed by a reef which extends 1.8 miles WNW from it.

Foul, unsurveyed ground lies between the two islands. Leeboard Ledge, a detached shoal, lies about midway between the two islands. Foul ground extends about 5 miles WNW and 1.5 to 2 miles NNW from South Brother Island. In the latter direction, the foul ground terminates in a reef awash which usually breaks. A reef lies SE of the island.

**Little Andaman Island** (10°42'N., 92°31'E.), the S island of the Andaman group, lies almost 28 miles S of Rutland Island. The island appears almost level from a distance, but rises

gradually to a 183m summit near its center. The island is well-wooded.

The passage between Little Andaman Island and South Brother Island has not been closely examined and should be avoided.

The low N side of Little Andaman Island is indented by Bumila Creek, which is difficult to make out until close off the entrance. A breaking reef extends almost across the entrance.

Anchorage for small vessels with local knowledge can be taken about 0.4 mile N of the creek entrance, in a depth of 14.6m, coral, with the entrance bearing 158°. This anchorage should be approached from the NW because the depths to the NE are irregular. The tidal currents set E and SE at the anchorage. A strong ebb sometimes flows out of the creek.

**Jackson Creek** (10°48'N., 92°24'E.), which lies about 9 miles SW of Bumila Creek, can be identified by a conspicuous square clump of trees near the bank which falls abruptly to the waters edge. A reef appears to extend 0.8 mile N from the W entrance point of the bay into which the creek discharges.

Anchorage has been reported available, in a depth of 13.7m, about 1 mile NNW of the entrance of the creek. Some prominent, cliffy islands lie in the NE part of the bay.

The coast, between Jackson Creek and Sandy Point, the SW end of Little Andaman Island about 16 miles to the S, appears to be fringed by a reef. The coast close S of the creek is cliffy.

A conspicuous sandy patch lies about 2 miles S of the W entrance point of the creek. A rocky reef extends about 1 mile WSW from Sandy Point.

A light is shown from a round concrete tower 6 miles E of Sandy Point.

**9.48 Api Islet** (10°39'N., 92°23'E.), a good landmark, lies close offshore about 9 miles S of Jackson Creek.

A drying reef extends almost 0.8 mile offshore from the SE extremity of Little Andaman Island.

The NE coast of Little Andaman Island has not been closely examined. Hut Bay indents the SE coast of the island SE of its summit.

**Hut Bay** (10°36'N., 92°35'E.) is an open bight on the E side of Little Andaman Island. Landing can be made through a gap in the reef close S of the village of Kwate-tu-Kwage. Two breakwaters, the one on the E being angular and longer, lie 1.3 miles ESE of the village. A light is shown from the head of E breakwater. South Point, on which a beacon lies 0.3 mile E of the roof of E breakwater.

Anchorage can be taken, in a depth of 12m, about 1.3 miles E of the N beacon or, in depth of 9m, about 1 mile ESE of the S beacon.

**Ten Degree Channel** (10°22'N., 92°30'E.), which lies between Little Andaman Island and the Car Nicobar, about 77 miles to the S, is deep and clear. A depth of 7.3m was reported (1977) to lie 4 miles S of Sandy Point, the SW point of Little Andaman Island.

South Sentinel Island lies NW of Little Andaman Island; Dalrymple Bank lies SW of Little Andaman Island. Both have been previously described in [paragraph 9.7](#).

Invisible Bank ([paragraph 9.7](#)), Barren Island ([paragraph 9.9](#)), and Narcondam Island ([paragraph 9.8](#)), which lie E of the Andaman Islands, have also been previously described.

## The Nicobar Islands

**9.49 Car Nicobar** (9°15'N., 92°46'E.), the N island of the group, lies about 77 miles SSE of Little Andaman Island. The island is densely wooded, mostly coconut trees.

The island has been reported to be a good radar target up to 14 miles.

**Sawi Bay** (9°14'N., 92°45'E.) indents the NW coast, between Keating Point and Hog Point, about 3.5 miles to SW. Foul ground extends 1 mile N from Keating Point and 0.5 mile N from Hog Point. Sawi Village lies 0.5 mile SE of Hog Point. A light is shown from a concrete tower on Hog Point.

The tidal currents off Sawi Bay set NE on the flood tide.

An observation spot lies on a small promontory that extends WNW from the coast about 1 mile S of Keating Point. Keating Point Light is shown from a round metal tower on the point; a racon and a radio beacon transmit from the tower.

A light is shown from a 9m high concrete tower on Observation Point, 1 mile S of Keating Point.

A coral patch, with a least depth of 10.1m, was reported to lie about 0.7 mile NW of the observation spot. A 9.1m patch lies 0.8 mile WNW of the same spot.

Anchorage can be taken, in a depth of 21.9m, rock and coral over a thin layer of sand, about 0.8 mile N of Sawi Village. Anchorage can also be taken in similar depths just over 1 mile W of the observation spot. Small vessels with local knowledge can anchor closer inshore off the observation spot.

**Arong Village** (9°09'N., 92°43'E.) lies 3 miles S of Hog Point. Anchorage can be taken about 0.5 mile W of the village, in depths of 16.5 to 20.1m. Vessels should approach the anchorage with the village bearing 090°.

**Kemois Bay** (9°07'N., 92°46'E.) is a slight indentation on the S side of the island. Kemois Village, fronted by a beach, lies close W of a well-defined entrance of a creek. A village lies close E of this entrance. A reef is reported to lie about 0.2 mile offshore.

The tidal currents set ESE on the flood at a rate of 3 knots at springs and in the opposite direction on the ebb. Small vessels with local knowledge can anchor, in depths of 18.3 to 21.9m, about midway between the two villages.

**Kakana** (9°07'N., 92°48'E.), a small village, lies about 2 miles SW of the SE end of Car Nicobar.

**Mus** (9°14'N., 92°47'E.), the principal village on the island and the residence of the Assistant Commissioner, lies 0.8 mile SE of Keating Point. The village lies at the head of a small inlet; the village of Lapate lies 1 mile farther SE. A flagstaff lies in the village of Mus.

Anchorage can be taken off Mus, in a depth of 13.7m, about 0.4 mile offshore, with the NE extremity of Car Nicobar bearing 284°. Vessels may drag anchor because of the strong currents at springs.

Vessels can anchor about 0.5 mile NE of Lapate Village, in a depth of 21.9m.

Tamalu and Perka are villages situated 4.8 and 5 miles SSE of Keating Point.

Anchorage can be taken, in a depth of 25.6m, about 0.5 mile offshore of either village.

**Malacca Village** (9°10'N., 92°49'E.) lies on the S side of a small bight, about 6 miles SE of Keating Point. A small masonry jetty, which dries completely at LW, serves as a good land-

mark. Two groups of beehive-shaped huts stand close N and S of the jetty and lie out clearly in contrast to the jungle. A conspicuous two-storied house, painted white and green with a red roof, stands about 0.3 mile SSE of the jetty. A beacon stands close SE of the two-storied house. Two flagstaffs stand near the jetty; two more stand in the village.

A dangerous reef extends offshore close N of the jetty. Stranded wrecks lie on this reef within 0.3 mile N and S of the jetty head.

**9.50** The Nicobar Islands extend about 160 miles SSE from Car Nicobar, the N island of the group. These islands are a dependency of the Andaman Islands and are administered by the Assistant Commissioner who resides at Mus, Car Nicobar. The islands range from hilly and undulating to mountainous and volcanic. There are few rivers.

The Nicobar Islands are usually divided into three groups. The N group consists of Car Nicobar and Batti Malv Island. The S group consists of Great Nicobar Island and Little Nicobar Island, together with their off-lying islets. The central group includes all the remaining islands of the Nicobar Islands. Nancowry Harbor, between the islands of Camotra, Nancowry, and Trinkat, is perhaps the most important and best sheltered harbor.

The channels between the groups of islands and between the individual islands have irregular depths, but are for the most part deep and clear of dangers.

## The Nicobar Islands—North Group

**9.51** Car Nicobar, the N island of the group, has been previously described in paragraph 9.49.

**Batti Malv Island** (8°50'N., 92°51'E.), which lies about 17 miles SSE of Car Nicobar, appears wedge-shaped from the offing. This very small island rises to a densely wooded peak about 73m high. The NW end of the island is low, but rocky cliffs lie on the other sides. Reefs appear to extend 0.5 mile off the NW, SW, and SE sides of the island. The 40m curve surrounding the island lies up to 5 miles SE and 2.8 miles N of the island. A light is shown from a metal framework tower, 12m high, on the N side of Batti Malv.

Batti Malv Island has been reported to be a good radar target up to 11 miles.

**Chowra Island** (8°27'N., 93°04'E.), which lies about 24 miles SSE of Batti Malv Island, is generally low but rises to a 104.5m high rocky pinnacle at its S end. The island looks like a hat from the offing. Sanenya, the principal village, lies on the NE coast.

Chowra Island has been reported to be a good radar target up to 23 miles.

Reefs extend about 1.5 miles from the NW side of the island. A shoal, with a least depth of 2.4m, lies between 2.5 miles NW and 4 miles NNW of the N point of Chowra Island. Depths of 16.5 to 18.3m are found between the shoal and the island reef.

Anchorage can be taken, in depths of 16.5 to 18.3m, abreast of Sanenya Village.

**Tillanchong Island** (8°31'N., 93°38'E.) lies with Cape Winifred, its S end, about 34 miles E of Chowra Island. Maharani Peak, the highest of several peaks forming a jagged ridge along



the length of the island, lies in the center of the island and attains an elevation of 322m.

Tillanchong Island has been reported to be a good radar target up to 17 miles.

**Paira Rock** (8°35'N., 93°36'E.), 107m high, lies 0.5 mile NNW of Cape Maud, the N extremity of the island. Several detached rocks lie up to 1 mile off the W side of the island.

**Isle of Man** (8°24'N., 93°39'E.), a detached rock 123m high, lies about 2.8 miles SE of Cape Winifred. A chain of needle-like rocks lie between this rock and the cape.

Paria Rock has been reported to be a good radar target up to 19 miles.

An unexamined detached shoal, with a least depth of 20.1m, lies about 9.5 miles SW of Cape Winifred.

**9.52 Castle Bay** (8°27'N., 93°38'E.), which lies on the SE coast of the island about 2 miles N of Cape Winifred, is deep and clear in its central part.

A rock awash lies about 0.3 mile S of Castle Bay Point, the N entrance point of the bay. Foul ground, with depths of less than 9.1m, extends about 0.2 mile S from the rock. A dangerous wreck lies in shoal water about 0.3 mile SSW of Castle Bay Point.

During fair weather, anchorage can be taken, in depths of 25.6 to 27.4m, with Castle Bay Point bearing 062°, distant a little over 0.5 mile.

**Teressa Island** (8°18'N., 93°07'E.), roughly crescent-shaped and low in its central part, lies 6.5 miles SE of Chowra Island. It appears as two separate islands from the offing. The N end of the island is 27m high. Hinam Village lies 4.5 miles SSE of the N summit and is only visible from seaward on a NE bearing. Laksi Village, which consists of some huts amongst the trees, lies 4 miles SE of Hinam Village. The village is hard to identify from seaward. Bengala Village lies on the E side of the island about 2 miles S of its NE extremity. Karawa Village lies 3.5 miles farther S.

Reefs extend over 1 mile from the N and S ends of the island, but less off the W coast.

Teressa Island has been reported to be a good radar target up to 25 miles.

Anchorage can be taken by small vessels with local knowledge close off Hinam Village, in depths of 11 to 25.6m. Small vessels can also anchor, in a depth of 25.6m, coral and coarse sand, SSW of Laksi Village, about 0.5 mile seaward of the coastal reef.

Small vessels with local knowledge sometimes anchor, in a depth of 45.7m, about 0.5 mile off Bengala Village, with the NE end of the island bearing 006°, the E end bearing 146°, and the N end of Bompoka Island bearing 115°. This is a fair weather anchorage.

**Bompoka Island** (8°14'N., 93°14'E.) lies 1.8 miles NE of the SE tip of Teressa Island and is 208m high. The intervening channel seaward of the fringing dangers is deep. Poahat Village lies on the W side of the island.

Small vessels with local knowledge can anchor about 0.3 mile offshore with the village in range 040° with the N peak of the island. Seaward of this position the depths decrease rapidly and caution is advised.

**9.53 Camorta Island** (8°09'N., 93°29'E.), separated from Tillanchong Island to the NNE by a channel about 12 miles wide, is very irregular in shape and hilly. A 52m hill lies close to the NE end of the island; a 186m high hill lies 1 mile N of the S end of the island. A 132m hill lies at the SE end of a range of hills that extends 4 miles SE from a position 1 mile SE of the NW end of the island. Mount Edgumbe, a tree-covered hill 109m high, lies about 4.3 miles N of the S end of the island.

Several villages and huts lie along the shores of the island.

The W coast is indented by bays which form Dring Harbor and Expedition Harbor. Nancowry Island lies close S of and overlaps the S end of Camorta Island. Nancowry Harbor, a secure, land-locked inlet, lies between them.

The NE coast of Camorta Island has not been closely examined. The SE side of the island is separated from Trinkat Island by Beresford Channel. The E entrance of Nancowry Harbor lies between the SE end of Camorta Island and the NE end of Nancowry Island. The approach to this entrance leads through Beresford Channel.

A coral bank, with depths of 25.6 to 27.4m, lies about 6 miles ENE of Horace Point, the N extremity of Camorta Island.

**Tides—Currents.**—The tidal currents off the E coast of Camorta Island, between a position about 2 miles WNW of the NW end of that island and a position between the entrances of Expedition and Nancowry Harbors, set S on the flood and N on the ebb. At springs, the N current attains a rate of 3 knots about 2 to 3 miles offshore. The S current attains a rate of 0.8 to 1.3 knots. At neaps, the N current attains a rate of 0.8 to 1.3 knots and the S current a rate of 0.3 to 0.8 knot.

At springs, tide rips frequently occur at various places all along the coast at variable distances offshore.

The W coast of Camorta Island, between Horace Point and Kai-hoa Village, almost 3.8 miles SW, is reef-fringed up to 0.5 mile offshore. From the village the coast extends SW for 1.3 miles and then S for 7.5 miles to Cave Point, the N entrance point of Expedition Harbor. Dring Harbor, which is available only to boats, is entered 2.3 miles N of Cave Point.

A 22m shoal lies about 6.5 miles NW of Cave Point.

The coast, between Satellite Point, the S entrance point of Expedition Harbor, and Reef Point, the S extremity of the island, is fringed by a narrow reef. This latter point is the N entrance point of the W entrance of Nancowry Harbor.

**Perseus Reef** (8°10'N., 93°27'E.) extends about 0.8 mile W from the NW end of the island. A shoal, as defined by the 20m curve, extends about 1.8 miles NW from the same point.

**9.54 Sanderson Rock** (8°07'N., 93°27'E.), which has a least depth of 1.5m, lies about 2.3 miles NW of the entrance of Dring Harbor. The rock lies near the W extremity of a shallow shoal that extends 10.3 miles offshore.

A rocky shoal, with a least depth of 8.2m, lies 0.5 mile offshore about midway between the entrances of Dring Harbor and Expedition Harbor.

Temporary anchorage can be taken almost anywhere off the W coast of Camorta Island, N of Exposition Harbor, in depths of 18.3 to 36.6m, poor holding ground. Vessels anchoring S of the harbor are advised to anchor in depths of 36.6m.

Vessels can anchor off Kai-hoa Village, in depths of 12.8 to 16.5m, about 1 mile offshore. Perseus Reef provides no protection during the Southwest Monsoon.

Anchorage can be taken, in a depth of 17.4m, off the entrance of Dring Harbor, about 0.7 mile W of the S entrance point, with that point bearing 089° and in line with a 64m hill near the head of the harbor. This is considered to be the best anchorage off this coast, because there is little or no current.

From the NE point of Camorta Island, about 1.5 miles E of Horace Point, the E coast of the island curves SSW and then SSE in a wide curve for about 8.5 miles and then S for 3.5 miles to Naval Point. A beacon lies about 0.8 mile N of this point. This point forms the N side of the E entrance of Nancowry Harbor. An L-shaped jetty extends from a position close WNW of Naval Point, and has a depth of about 11m at its seaward end. A reef extends up to 1 mile offshore along this entire stretch of coast except off Moshoit Village, where it lies only 0.3 mile off. The village lies about 4 miles SSW of the NE point of the island. This coastal reef is easily seen under favorable light conditions.

Caution is necessary when approaching this coast between the NE end of Camorta Island and the N entrance of Beresford channel, because this area has not been closely examined.

**Trinkat Island** (8°05'N., 93°35'E.), which lies between 1.5 and 2.5 miles E of the S part of Camorta Island, is separated from that island to the W and NW by False Bay and Beresford Channel. Trinkat Island is low, level, and covered by coconut trees. An extensive reef surrounds the island. Morrel Point, the S end of the island, is marked by a beacon.

**Beresford Channel** (8°07'N., 93°33'E.) is entered from the S through False Bay. Both shores are fronted by reefs and shoals that extend almost 0.8 mile offshore. A number of shoals, with depths of 5.5 to 11m, lie in the middle of the S part of the channel. The channel on both sides of Middle Reef, which lies about 3.5 miles NNW of Morrel Point, is about 183m wide. The W channel has depths of 7.6 to 25.6m and the E channel has depths of 5.8 to 20.1m. The area N of Trinkat Island has not been closely examined.

## Expedition Harbor and Grand Harbor

**9.55 Expedition Harbor** (8°03'N., 93°30'E.) is landlocked and, together with Grand Harbor, its extension to the NE, is of considerable size. A low, narrow peninsula separates Expedition Harbor from Nancowry Harbor to the S. The entrance of Expedition Harbor lies between Cave Point and Satellite Point, about 0.3 mile SSE.

The S and E sides of the harbor are indented by coves, and are fringed by reefs and mangroves. Hoau Village lies about 0.3 mile ESE of Edgumbe Point. The latter point lies a little over 1 mile NE of Satellite Point. The coast from Edgumbe Point extends E and N to Edye Point, about 0.9 mile NNE, the S entrance point of Grand Harbor.

**Wasp Point** (8°03'N., 93°29'E.) lies about 0.3 mile SE of Cave Point and forms the inner entrance point of the harbor. The coast from Wasp Point extends NNE for 0.7 mile to Devils Point, then N and NE for about 1.3 miles to the N entrance

point of Grand Harbor. A conspicuous palm tree lies close N of this point.

Grand Harbor is entered between Edye Point, the N end of the promontory separating Grand Harbor from Expedition Harbor, and a point about 0.3 mile to the N. The harbor is about 2 miles long in a N and S direction. Two creeks indent the E shore. The bay at the N of the harbor is foul.

**Depths—Limitations.**—Coral patches, which dry 1.2m, lie 0.2 mile SSE of Cave Point.

A channel, about 91m wide and having depths of over 18.3m, forms the inner entrance of Expedition Harbor, between the reefs fringing Wasp Point and Satellite Point. The channel passes about 91m N of the latter point.

Middle Reef, an extensive drying shoal, lies in the middle of the fairway, abreast of Devils Point. A channel, about 183m wide and having depths of 12.4m, leads between the SE end of Middle Reef and the reef fringing Edgumbe Point.

A drying reef extends 0.2 mile SE from Foul Point, about 0.5 mile NE of Devils Point. A channel, about 183m wide with a least depth of 23.8m, leads between the SW end of this reef and the N end of Middle Reef.

Grand Harbor has depths of 7.3 to 14.6m in its middle part. Foul ground extends up to 0.3 mile off the salient points.

**Anchorage.**—Vessels can anchor, in 18.3m, mud, with Devils Point bearing 340°, distant 0.3 mile. Vessels intending to stay are advised to use Nancowry Harbor, because of the swarms of mosquitoes which infest this anchorage.

**Directions.**—Vessels wishing to enter Expedition Harbor are advised to wait until the sun is high, and is possible to enter at LW, when all the fringing reefs and dangers are visible. Vessels approaching from the N or S should keep at least 1 mile off the coast until abeam of the entrance. When Hoare Village opens out in the entrance and bears 071°, vessels should alter course to this heading taking care to avoid the fringing dangers on both sides of the channel. When Devils Point bears 000°, course can be altered to the NNE which leads to the recommended anchorage.

Vessels not having local knowledge should not proceed above Devils Point into Grand Harbor until the N end of Middle Reef and the SW end of the drying reef fringing Foul Point are clearly visible.

## Nancowry Harbor (8°01'N., 93°31'E.)

[World Port Index No. 49740](#)

**9.56** Nancowry Harbor lies between the S coast of Camorta Island and the N coast of Nancowry Island. This spacious, landlocked harbor is deeply indented by several bays and inlets. The harbor can be entered by deep-draft vessels either through the E or W entrance during either monsoon to take sheltered anchorage. Both entrances are readily identified from the offing. The harbor consists of four bays, Satellite Bay and Fort Bay on the N side, and Wasp Bay and Spiteful Bay on the S side. Cross Harbor lies between Fort Bay to the N and Spiteful Bay to the S.

Nancowry Harbor has been reported to be a good radar target up to 25 miles.

**Tides—Currents**

The tidal currents set E on the flood and W on the ebb. These currents have considerable strength in the entrances, but are very weak within the harbor. Between Man Point and Indian Point the currents are very strong on both tides.

**Depths—Limitations**

The depths in the W entrance are over 18.3m and the depths in the E entrance range from 11 to 42m. A depth of 22m exists in the three recommended anchorage areas.

Although providing excellent shelter for all types of vessels, the harbor has few facilities. The residence of the Government Agent lies about 0.3 mile WNW of Naval Point.

A stone jetty, 119m long, with wooden extension projecting about 100m SW and W from its head, lies about 0.3 mile WNW of Naval Point. There are depths of about 11m at the outer end of the jetty. The approach to the jetty requires much attention as there are shoals and rocks in the vicinity.

A wooden jetty, 72m long and 6.1m wide, extends in a W direction from the shore about 0.2 mile SSW of Mayo Point.

**West entrance.**—The W entrance of the harbor lies between Reef Point and Man Point on the N side and Burleigh Rock and Indian Point on the S side. The latter point, which forms the NW extremity of Nancowry Island, lies NE of Burleigh Rock. The W entrance can be identified by vessels up to 5 miles offshore by the trend of the coast inland to form its S side. Reef Point can be identified by a white mark on it and would otherwise be very difficult to identify. This mark cannot be relied on. Man Point is also difficult to identify. There is a least depth of 11.9m in the fairway of the entrance which is about 183m between the dangers on each side.

**Northbrook Patch** (7°59'N., 93°29'E.), which has a least depth of 3m, lies about 0.3 mile SSW of Reef Point. Shoal patches lie between this danger and the coast to the W of the point.

Burleigh Rock, 7.3m high and topped by a wooded summit, is joined to the SE by a reef. Foul ground extends about 137m NW and 91m N from the rock. A patch, with a depth of 7.6m, lies 0.2 mile SSW of the rock.

**East Entrance Approaches.**—The approach to the E entrance lies between Morrel Point, the S extremity of Trinkat Island to the NE, and Laire and Reid Points to the SW. The latter two points lie on the NE coast of Nancowry Island. Trinkat Island is easily distinguished from Camorta Island, which is higher and more open.

A disc beacon lies on Reid Point and a similar beacon lies about 91m NNW of Morrel Point.

The coast between Laire Point and Reid Point is fronted by an extensive reef which extends up to 0.5 mile offshore. The edge of this reef, except at HW and on very calm days, is marked by breakers.

A shoal, with a least depth of 4.9m lies on the edge of the shore bank, about 0.4 mile ENE of Reid Point. A 9.8m patch lies near the center of the channel about 0.5 mile NE of the same point.

**Eastern Shoals** (8°02'N., 93°34'E.), a large shoal area with depths of less than 11m, extends from 1 mile SSW to 1 mile

WSW of Morrel Point. Depths of 7.6 and 8.5m lie close within the outer edge of Eastern Shoals.

The dangers N of an imaginary line joining Naval Point and Marrel Point have been previously described with Beresford Channel in [paragraph 9.54](#).

**East entrance.**—The E entrance of Nancowry Harbor lies between Naval Point to the N, and between Reid and Mayo Points to the S. A beacon lies on Mayo Point.

Naval Point Light is shown from a structure 0.2 mile S of **Naval Point** (8°02'N., 93°22'E.).

The entrance channel, which is about 0.2 mile wide between the fringing dangers on either side, has a least depth of 11m.

Shoal ground, as defined by the 10m curve, extends up to 0.3 mile ESE and about 0.3 mile S from Naval Point.

The shore bank, as defined by the 10m curve, lies between Reid and Mayo Points and extends up to 0.3 mile offshore about midway between them.

A detached 7.3m shoal lies 0.3 mile NW of Reid Point, close off the above bank.

A white metal beacon with a ball topmark lies about 0.2 mile S of Naval Point near the edge of the reef. A similar beacon lies 1 mile N of the same point on the edge of the shore reef.

**Wasp Bay** (8°00'N., 93°31'E.), which forms the SW part of Nancowry Harbor, lies between the W entrance and an imaginary line drawn between Easter Point and Leda Point to the ENE. Itoe Village, which lies on the E shore of the bay about 0.5 mile S of Leda Point, serves as a good mark.

Wasp Bay has depths of over 18.3m in its central part, but is fouled by some dangers and irregular depths around its shores.

A shoal, with a least depth of 2.4m, lies 0.2 mile offshore about 0.5 mile NNE of Man Point, which lies 0.3 ENE of Reed Point. A shoal, with a least depth of 9.8m, lies about 0.7 mile NE of the same point. Foul ground, with depths of less than 11m, extends 0.3 mile SE and 0.5 mile ENE from Easter Point.

A drying rock lies in the E part of the bay, a little over 1 mile SSW of Leda Point and about 0.3 mile offshore. Shoals, with depths of 4.9 to 12m, lie between this rock and the shore reef.

**Alfrey Shoal** (8°01'N., 93°31'E.), having a depth of 9.7m, lies almost in mid-channel, a little over 0.5 mile SW of Leda Point.

**Satellite Bay** (8°02'N., 93°30'E.), which forms the NW part of Nancowry Harbor, is entered between Easter Point and Alfred Point, about 1.3 miles NE. Alfred Point has been reported to be a good radar target up to 21 miles.

A deep channel, about 0.3 mile wide, leads between the W side of Alfrey Shoal and the E side of the foul ground, which extends 0.5 mile ENE from Easter Point. Depths of 16.5 to 31.1m exist in the outer part of the bay.

**Satellite Patch** (8°01'N., 93°30'E.), which lies about 0.7 mile SW of Alfred Point, has a least depth of 4.1m. A 6.4m patch lies about 183m S of this patch, and shoal patches, with depths of 5.5 to 11m, lie between Satellite Patch and the coast to the N and NW.

Shoal ground, as defined by the 11m curve, extends 0.3 mile SSW from Alfred Point and 0.3 mile NW and N from Leda Point.

**Cross Harbor** (8°02'N., 93°32'E.) is entered from the W between Alfred and Leda Points and from the E between Naval

and Mayo Points. Depths in the harbor area range from 21.9 to 53.1m, mud.

**Fort Bay** (8°02'N., 93°31'E.), entered between Alfred Point and Ray Point about 1 mile ENE, recedes about 0.8 mile NNW. The latter point can be identified by two radio masts which lie 0.2 mile to the NE. Battery Point, which lies 0.2 mile NW of Ray Point, can be identified by a conspicuous clump of casuarina trees about the same distance to the N. A flag staff lies close NE of Ray Point.

Depths in the bay range from 14.6 to 23.8m in its central part, shoaling gradually to the coastal reef which fringes its shores. A wreck, with a depth of 14.6m, lies about 0.3 mile W of Ray Point.

**Spiteful Bay** (8°01'N., 93°32'E.), the SE part of Nancowry Harbor, is entered between Mayo Point and Leda Point. A village lies on the E shore of the bay, about 0.3 mile S of Mayo Point.

A 5.5m patch lies about in the middle of the entrance, about 0.3 mile ENE of Leda Point.

Depths of 16.5 to 23.8m are found in the outer part of the bay, shoaling gradually to the drying flats at its head. Shoals on the W side of the bay extend up to 0.3 mile offshore.

## Anchorage

There is an outer anchorage about 1 mile E of **Naval Point** (8°02'N., 93°22'E.). The depth is 21.9m and the holding ground is good. A long scope of chain is advisable as the squalls off the land are sometimes heavy. The anchorage is otherwise sheltered.

Excellent anchorage is provided in the outer part of Fort Bay, in a depth of 21.9m, mud, with the previously-mentioned conspicuous clump of trees bearing about 075°, distant 0.3 mile. The previously-mentioned wreck should be given a wide berth. This anchorage is sheltered and little current is experienced.

Anchorage can be taken in the middle of the entrance of Spiteful Bay, in a depth of 21.9m. This anchorage is somewhat exposed to the sea breezes.

Anchorage can be taken in the fairway of the E entrance of Nancowry Harbor, in convenient depths, on a line joining the stone jetty and the village of Mala about 0.2 mile SSW of Mayo Point.

## Directions

**West entrance.**—Vessels should approach the W entrance from the SW in order to avoid the dangers extending SSW from Reef Point and terminating in Northbrook Patch. The conspicuous clump of casuarina trees near Battery Point, midway between Man and Indian points, bearing about 039°, leads SE of Northbrook Patch. When Reef Point bears 000°, steer on that bearing until Burleigh Rock bears 090°. Then gradually alter course to the NE, avoiding the foul ground which extends NW from Burleigh Rock, and course shaped to pass midway between Man Point and Indian Point. In passing between these points, vessels should have good steerage way as the currents are strong and there are many eddies.

After passing Man Point, the course should be altered to about 051°, and when about 0.8 mile off the village, course

should be altered N, passing close W of Alfrey Shoal and E of the 4.8m shoal, about 0.3 mile W of Alfrey Shoal.

When Mayo Point bears about 080° and is open N of Leda Point, alter course should be altered E and the radio masts NE of Ray Point should be steered for on a course of 055°. This course leads between the dangers extending from Leda and Alfred Points and into Fort Bay where anchorage can be taken as convenient.

**East entrance.**—Vessels approaching the E entrance should keep Reid Point bearing 281° and in line with Alfred Point. This course leads S of Easter Point. When the right tangent of Trinkat Island bears 034°, the course should be altered N to bring Bay Point Beacon to bear 309° and kept on that bearing which leads NE of the reef fronting the coast between Laire and Reid Points.

When Mayo Point bears 261°, the course should be altered to 268° to pass midway between Naval Point and the N shore of Nancowry Island, about 0.5 mile S. This track passes 183m S of a shoal with 5.8m of water above, located 0.5 mile SE of Naval Point and 0.2 mile N of another shoal with a depth of 6.7m on the S side of the entrance. When clear of Mayo Point, alter course to the N to clear the spit extending NW from Mayo Point. Anchorage can be taken, as convenient, in Fort Bay.

## The Nicobar Islands—Central Group

**9.57 Katchall Island** (7°56'N., 93°22'E.) is separated from Camorta Island and Nancowry Island to the NE by Revello Channel, which is about 3.8 miles wide and apparently free from dangers, except for a detached 12.8m patch which lies about 4.5 miles NE of the SE end of Katchall Island. The island is densely wooded and rises to a height of 254m in its central part.

Katchall Island has been reported to be a good radar target up to 18 miles.

Depths off the W side of the island are very irregular. Some 16.5 to 18.3m patches lie up to 4 miles off this coast.

**West Bay** (7°55'N., 93°20'E.) deeply indents the W side of the island and is foul in its inner reaches. It has been reported that a SW swell occasionally sets into the bay during the Northeast Monsoon and that the tidal currents attain a rate of 2 knots across the entrance. A light is shown from a concrete tower, 11m high, situated on the N entrance point of West Bay.

Vessels with local knowledge can anchor, in a depth of 16.5m, about 1 mile SSW of the NW entrance point.

**South Bay** (7°53'N., 93°24'E.) indents the S coast of the island close W of its S end. The bay should not be entered because of the rocks and foul ground found within its limits. It has been reported that Cape Albany, the S end of the island, had extended 0.2 mile farther S than charted.

**East Bay** (7°59'N., 93°25'E.), backed by steep cliffs and Katchall Peak, indents the NE side of the island. Numerous rocks and foul ground encumber the bay and lie up to 1.5 miles off its shores. The depths in the bay range from less than 1m to more than 36.6m. A light is shown from a square tower, 9m high, situated on the N entrance point of East Bay.

**Hoinipoh Bay** (7°58'N., 93°26'E.), a slight indentation, lies close S of the S entrance point of East Bay. Anchorage can be taken, in depths of 21.9 to 23.8m, with a conspicuous hut in the

village bearing 256°, distant 0.5 mile. The bay is often visited by trading vessels.

## Sombrero Channel

**9.58 Sombrero Channel** (7°41'N., 93°36'E.) separates the central and S groups of the Nicobar Islands. The channel is 30 miles wide between Cape Albany and Sombrero Point, the N extremity of Little Nicobar Island. The depths in the channel are irregular, but there is deep water in mid-channel.

Strong tidal currents set through this channel.

A yellow, clay patch, with a depth of 21.9m, lies in the W approach to Sombrero Channel about 12 miles WSW of Cape Albany. Shoal patches may exist in this area.

A detached coral bank, which shoals to a depth of 16.5m at its N end about 3 miles SSE of Cape Albany, is roughly 9 miles long and 5 miles wide. Depths elsewhere on this bank range from 20.1 to 31.1m. This bank has been reported to be extending to the W.

**Miroe Island** (7°31'N., 93°32'E.), low and small, lies 10.5 miles WNW of Sombrero Point. The island has been reported to be a good radar target up to 19 miles.

**Trak Island** (7°28'N., 93°37'E.) lies 5 miles WNW of Sombrero Point; Treis Island lies 1 mile SE of Trak Island. Both islands are small, reef-fringed, and surrounded by sunken rocks. A rock, which has a depth of less than 1.8m, lies about midway between Treis Island and Sombrero Point.

## The Nicobar Islands—South Group

**9.59 Little Nicobar Island** (7°20'N., 93°42'E.) is densely wooded, with Mount Deoban rising to a height of 413m on the central part, and the Empress Peak rising to 401m on the NE part of the island.

Little Nicobar Island has been reported to be a good radar target up to 23 miles.

The NW coast between Sombrero Point and Pahua, about 6 miles SW and then about 7.5 miles S to Cape Edinburg, is fringed by a reef which extends up to 0.5 mile offshore.

**Pulo Milo** (7°24'N., 93°42'E.) lies about midway between Sombrero Point and Pahua, in the bight formed by these two places. Two 5.5m patches lie in the channel between Pulo Milo and the coast of Little Nicobar Island, about 0.8 mile ENE and 0.7 mile ESE of the N end of Pulo Milo. A light is shown from a structure on the NE point of Pulo Milo.

The channel separating Pulo Milo from Little Nicobar Island is about 0.4 mile wide, but is narrower on the S side where the channel has not been closely examined. Depths of less than 11m lie within 0.4 mile of Little Nicobar Island, E of Pulo Milo.

A 18.3m patch lies about 13 miles W of Pulo Milo. Depths of 11.4m and 15.5m lie 2.5 and 5 miles W of Pulo Milo.

Anchorage can be taken in the channel between Pulo Milo and Little Nicobar Island, in depths of 16.5 to 23.8m, sand and coral. This anchorage is sheltered.

**Ileya** (7°25'N., 93°42'E.), a small village, lies on the NE coast about 1.5 miles SSE of Sombrero Point. A small drying patch lies close E of the village.

**Menchal Island** (7°24'N., 93°45'E.), small in extent and reef-fringed, lies 4 miles SE of Sombrero Point and 1.3 miles

off the NE coast of Little Nicobar Island. A depth of 11.9m exists in the intervening channel, but less depths may exist.

Anchorage can be taken by vessels with local knowledge, during periods of fair weather, in depths of 11 to 12.8m, about 0.5 mile SW of Menchal Island. The tidal currents have been reported to be strong, especially at springs.

The SE coast of Little Nicobar Island, which forms the NW side of St. Georges Channel, is fairly steep-to.

## Great Nicobar Island

**9.60 Great Nicobar Island** (7°00'N., 93°49'E.), the S and largest of the Nicobar Islands, is well-wooded and fertile. Its NW end lies about 4 miles SSE of Little Nicobar Island.

The island rises to considerable heights throughout its length and is marked by steep-sided mountains covered by dense jungle growth. Mount Thuillier rises to a height of 642m in the NE part of the S end of the island. A second ridge extends W from this peak and a third ridge extends SW from a position near the center of the main ridge.

Great Nicobar Island has been reported to be a good radar target up to 23 miles.

**Caution.**—The coast of the island appears to be reef-fringed on all sides. The edge of the submarine plateau, from which the island rises, has not been clearly defined. It apparently extends a considerable distance W from the coast. The W coast of the island, which is fully exposed to the Southwest Monsoon, has not been closely examined. Vessels are advised to use caution when approaching the island.

A detached 18.3m shoal lies about 19 miles SW of the S end of Great Nicobar Island. A detached 17.7m patch was reported (1975) to lie about 11.8 miles SSW of the same point. The position of this latter depth is approximate.

**9.61** Between the NW point of Great Nicobar Island and the NW entrance point of Ganges Harbor, almost 5 miles ENE, the coast is slightly indented and reef fringed. A 6.4m shoal lies 1.5 miles off the N coast of Great Nicobar Island about 1.8 miles E of the N end of Kondul Island. A 0.9m patch lies about 2 miles farther E.

**Kondul Island** (7°13'N., 93°43'E.), high and rocky on its N side, rises to a height of 122m.

**Caution.**—Caution is advised when approaching Kondul Island and the adjacent coast because uncharted dangers may exist. Less depths than charted have been reported to lie W of this island and may extend for a considerable distance offshore. A rock, with a least depth of 1.8m, lies 0.7 mile W of the S end of the island.

**Kondul Harbor** (Pryce Channel) (7°12'N., 93°43'E.) is formed by the S side of Kondul Island and a bight in the NW coast of Great Nicobar Island. A radio station is situated in Mayaiya Village, about 0.3 mile N of the S part of Kondul Island.

A 4.6m shoal, which has not been closely examined, lies about 0.8 mile SSE of the SE end of the island.

**Ganges Harbor** (7°13'N., 93°48'E.), which lies in a bight on the N coast of Great Nicobar Island about 5 miles E of Kondul Island, is entered between two points fouled by shoals. A spit, with a depth of 6.4m at its outer end, extends almost 1 mile

WSW from the E entrance point; foul ground lies S of the coral head. A reef extends almost 0.5 mile NNE from the W entrance point.

A coral head, with a depth of less than 1.8m, lies 1.5 miles N of the E entrance point. A shoal, which has two rocks with depths of less than 1.8m on them, lies almost midway between this shoal and the dangers extending from both entrance points.

**9.62 Kabra Island** (7°18'N., 93°51'E.), 63m high, lies almost 3 miles N of Murray Point, the N end of Great Nicobar Island. A 4.6m patch lies in the intervening channel, about 1.3 miles NE of Murray Point. Its position is doubtful.

**Anchorage.**—Anchorage can be taken off either the E or W side of Kondul Island according to the direction of the wind. The E anchorage has a depth of 12.8m about 0.5 mile offshore. Depths of 18.3 to 21.9m exist in the W anchorage, but caution is advised in its approach.

Kondul Harbor provides sheltered anchorage, in depths 21.9 to 31.1m, sand and coral, E or NE of the previously-described 4.6m shoal.

Ganges Harbor provides anchorage, in depths of 16.5 to 29.3m, coarse sand and clay, well clear of the previously-described dangers.

**St. Georges Channel** (7°17'N., 93°46'E.), which lies between Little Island and Great Nicobar Island, has considerable depths in the fairway over an uneven bottom. Its W entrance has a least width of 3.8 miles reduced to a navigable width of 2.8 miles by the shoals extending from both shores.

The N side of the channel is free from off-lying dangers, except in the W entrance, where depths of 14 to 16.8m, about 0.4 mile apart, were reported to lie 1 mile ESE of the S end of Little Nicobar Island. A 32m shoal was reported to lie 0.7 mile S of the same point.

A bank, with a depth of 20.1m, the existence of which is doubtful, was reported to lie about in the middle of the E entrance almost 3 miles NW of Kabra Island.

The tidal currents through this channel are strong.

Between the NW point of Great Nicobar Island and Teesta Point, about 10 miles to the S, the coast is high and rugged. This coast has not been thoroughly examined and lesser depths than charted may lie between 2 and 4.5 miles offshore.

Shoal patches, having depths of 12.8m and 18.3m, lie 6.5 miles W and 4.5 miles WNW of Teesta Point.

A depth of 23m lies about 8 miles NW of Teesta Point; in 1986 it was reported that the area may have lesser depths than charted. A depth of 8.2m lies 2.5 miles SSE and another depth of 6.4m lies 4.5 miles SW of Teesta Point; a report also indicates that lesser depths may exist in the area.

Megapod Islet lies about 12.5 miles SSE of Teesta Point. A depth of 11m lies 2.5 miles WNW of Megapod Islet.

**Casuarina Bay** (7°01'N., 93°41'E.), of no commercial importance, is entered close E of Teesta Point and recedes about 1 mile to the N.

Between the SE entrance point of Casuarina Bay and Indira Point, about 16.5 miles SSE, the coast is indented by a number of small bays, none of which have been closely examined. The villages of Kopenheat and Tae-angha lie about 3 and 5 miles SSE of Casuarina Bay.

Indira Point (formerly Pygmalion Point) has been reported to be good radar target up to 21 miles; a light is shown from the point and a racon transmits from the light tower.

The coast between Teesta Point and Indira Point is fronted by shoal ground which lies between 4 miles off the former point to 2 miles off Indira Point. Less water than charted has been reported to exist along this section of coast.

**Anchorage.**—Vessels with local knowledge can anchor, in a depth of 20.1m, in Casuarina Bay, about 1 mile S of the NW entrance point. Protection is provided during the Northeast Monsoon.

Vessels with local knowledge can anchor in the entrance of a bight between the villages of Kopenheat and Tae-angha, in a depth of 27.4m, about 1 mile offshore.

Extreme caution is advised when approaching the above anchorages because of the numerous reports of shallow depths.

Two small villages lie at the head of a bight about 8.5 miles NNW of Indira Point. A small island lies close inshore about 6.5 miles NNW of the same point.

The coast between Murray Point, the NE extremity of Great Nicobar Island, and Indira Point about 29 miles to the S, is hilly, wooded to the water's edge, and indented by several bights. Mariners are advised that this coast has not been closely examined.

**9.63 Trinkat Champlong Bay** (7°13'N., 93°52'E.) is entered between Murray Point and Kerr Point, about 1.8 miles SE. The NW shore of the bay is rocky and steep, with some coral heads extending up to 183m offshore. A sandy beach lines the S shore. Two conspicuous rocks lie about 0.5 mile W and 0.8 mile WSW of Kerr Point. The W rock is flat-sided.

A coral reef, partly dry at lower water, extends about 0.2 mile offshore, NE of the W rock. Other dangers lie within the 6m curve. A shoal, as defined by the 20m curve, extends about 2 miles NE from Murray Point. A depth of 4.6m lies near the outer edge of this shoal.

**Anchorage.**—Trinkat Champlong Bay provides good, safe anchorage for large vessels. Protection is provided during the Southwest Monsoon. A vessel anchored in a depth of 51.2m, coral and shells, with Murray Point bearing 310°, distant almost 0.8 mile.

**Laful Anchorage** (7°10'N., 93°54'E.), a small coastal indentation, lies about 3.3 miles S of Kerr Point. A ledge, with depths of less than 9.1m and apparently steep-to, extends about 0.2 mile offshore. The coast in the vicinity is fairly steep-to. Protection is provided from W winds.

The anchorage should be approached by steering 270° for the middle of the S half of the sandy beach which is a good mark. Anchorage can be taken when the coast S of the bight is almost shut in by South Point, the S entrance of the bay. Care should be taken because the depth decreases rapidly.

Between South Point and Pigeon Islet, about 5.5 miles to the S, the rocky coast has no pronounced indentations except for a small bay NW of the islet, which has not been closely examined. Good anchorage has been reported available in this bay. Depths of 31.1m have been reported to lie close off the bay shores.



**9.64 Tenlaa Bay** (7°02'N., 93°56'E.), which lies 3 miles S of Pigeon Islet, is narrow and has depths of 33m near its head. The bay is sheltered except from NE winds.

Between Tenlaa Bay and the NE of Koal-ta-pain, a promontory about 2 miles SE, the coast is rugged. The promontory forms the NE side of Campbell Bay, a bight fully exposed to SE winds and seas. The entrance of the bay is difficult because it is fouled by rocks. Cerebus Rock lies 0.4 mile S of the E entrance point of the bay.

A light is shown on the SW side of Campbell Bay, close within its entrance.

There is an L-shaped jetty, with a depth of 5m at its head, situated on the NE side of the bay; it is usually used only in good weather. A breakwater, marked at its head by a light, extends SW from Man Point.

Leading lights, situated close together at the head of Campbell Bay and in line bearing 323.75°, lead in from seaward. Between Campbell Bay and Tara Point, about 7.5 miles SSW, the coast forms a small bight which is indented at its head.

**Boat Rock** (6°56'N., 93°58'E.), awash, about 1 mile SE of the N entrance of the bight, has three smaller rocks close SW of it.

Mataita-anla, the S indentation in the above bight, lies about 1 mile WNW of Tara Point. Small vessels with local knowledge can anchor in this indentation protected from SW winds and seas. Rocks and shoals restrict the available space.

**9.65 South Bay** (6°48'N., 93°52'E.), entered between **Hayward Point** (6°47'N., 93°52'E.), also known as Kwangtung Point, about 3 miles SW of Tara Point and Indira Point, about 3.8 miles farther SW, provides shelter during the Northeast Monsoon. A sandbar blocks the entrance of the Galathea River which flows into the head of the bay.

Hayward Point has been reported to be a good radar target up to 20 miles.

Walker Island, about 1.5 miles NNE of Indira Point, is flat, small and rocky. Several heaps of stones lie on the island. The island is prominent from the S, but is difficult to make out from the E because of the high land behind it.

A breaking rock, with a depth of less than 1.8m, lies about 0.7 mile SSE of Hayward Point.

Vessels can anchor within the bay as convenient, in depths of 16.5 to 18.3m.